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**4th Meeting of the Conference of the Contracting Parties**

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**CONVENTION ON WETLANDS OF INTERNATIONAL IMPORTANCE  
ESPECIALLY AS WATERFOWL HABITAT**

**REVIEW OF NATIONAL REPORTS SUBMITTED BY THE CONTRACTING PARTIES**

**AND**

**REVIEW OF IMPLEMENTATION OF THE CONVENTION SINCE THE THIRD MEETING  
OF THE CONFERENCE IN REGINA, SASKATCHEWAN, CANADA IN MAY/JUNE 1987**

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## I. GENERAL INTRODUCTION

### **Background to national reports**

1. Article 6.2 of the Ramsar Convention states that the Conference of the Contracting Parties shall be competent:

- to discuss the implementation of this Convention;
- to discuss additions to and changes in the List;
- to consider information regarding changes in the ecological character of wetlands included in the List provided in accordance with paragraph 2 of Article 3; and
- to make general or specific recommendations to the Contracting Parties regarding the conservation, management and wise use of wetlands and their flora and fauna.

These four requirements figured in the original text adopted at Ramsar, and were not amended either by the 1982 Paris Protocol (in force since 1 October 1986), or by the amendments adopted at Regina in May/June 1987 (not yet in force).

2. The purpose of the present paper is to provide basic information enabling delegates to the fourth meeting of the Conference, to be held at Montreux in June/July 1990, to carry out these requirements. It follows the lines of papers presented to previous meetings: Summary of national reports and Review (Cagliari Proceedings 163-224 and 311-342); Overview and Review (Groningen Proceedings 143-180); Review (Regina Proceedings 185-250).

3. In order to promote discussion and exchange of views, each Contracting Party is requested to submit a written report to the Ramsar Bureau before a meeting of the Conference. This practice has now become well established: at the 1980 Cagliari meeting, 25 of the then 28 Contracting Parties provided national reports; at Groningen in 1984, 27 out of 35 Contracting Parties submitted reports; while for Regina in 1987, 35 out of 45 Contracting Parties presented a national report. These reports are published in full, in the Conference working language in which they were submitted, in the Proceedings of the meeting. They provide by far the most detailed body of information on the Convention and its operation within individual Contracting Parties, and provide a framework for discussion

at the meeting. This was recognized in the first Recommendation adopted at Groningen (Recommendation 2.1) which noted that "submission of timely and detailed national reports is of vital importance for the purpose of monitoring implementation of the Convention and for the purpose of sharing information on wetland conservation" and recommended that "all Parties should submit detailed national reports to the Bureau at least six months prior to each ordinary meeting of the Conference of the Parties".

### **National reports submitted to the present meeting**

4. The same Groningen Recommendation called on the Bureau to draft a simplified questionnaire for national reports, so as to make reports easier to prepare, while ensuring they reveal the information desired. The Ramsar Bureau, in consultation with the Standing Committee, drew up a questionnaire for use at the Montreux meeting; this questionnaire lays special stress on the four main obligations accepted by Contracting Parties and set out in the Framework Document to be considered at the present meeting (DOC. C.4.12); the questionnaire also pays particular attention to the Montreux workshops devoted to these four obligations (Workshop D: the List; Workshop F; international cooperation; Workshop E; wise use of wetlands; and Workshop C; establishment of nature reserves). The present review will, it is hoped, therefore be of use in summarizing information for discussion at these workshops.

5. The questionnaire was sent (under the title 'Outline for national reports') to all Contracting Parties, under cover of Bureau Notification 1989/7 dated 19 May 1989. Contracting Parties were requested to submit their national reports to the Bureau by the end of December 1989, i.e. six months before the Montreux Conference.

6. Since the time available in plenary sessions is limited, there will not be time for each national delegation to present its own report in detail. Instead, the different issues will be discussed in the workshops, which will report back to later plenary sessions. National reports will be published in the Proceedings of the meeting.

7. Rather few national reports were submitted by the end of 1989, which delayed preparation of the present review. A rather brief review was included in DOC. C.4.6 ('Overview paper to Workshop A: National reports'); this document highlighted some of the principal issues raised in 24 reports received by early April 1990). It also distilled twenty major questions raised by these 24 reports.

8. By early June 1990, national reports had been received from the following 37 Contracting Parties: Algeria, Australia, Belgium, Bulgaria, Canada, Chile, Denmark, Egypt,

Finland, German Democratic Republic of Germany, Federal Republic of Germany, Greece, Hungary, Iceland, India, Ireland, Japan, Malta, Mauritania, Mexico, Morocco, Netherlands, New Zealand, Norway, Poland, Portugal, South Africa, Suriname, Sweden, Switzerland, Tunisia, Uganda, Union of Soviet Socialist Republics, United Kingdom, United States of America, Uruguay and Venezuela. Preliminary reports were also received from Austria and Senegal. It is likely that further national reports will be received before, or at the Conference. As far as possible, these reports will be incorporated into the final version of the present document, to be published in the Proceedings. Because of the late receipt of the national reports, the present document is being circulated, for the moment, in English only, as an information document.

9. The national reports in general follow very closely the format of the circulated questionnaire. The degree of detail provided varies as at previous meetings from one Contracting Party to another. Some Contracting Parties have gone into considerable detail, notably as regards ecological character and management of wetlands designated for the List (e.g. Australia, Denmark, Federal Republic of Germany and United Kingdom); such information is of particular value for the database which the Bureau is currently developing on Ramsar sites (see paragraph 233 below). Some Contracting Parties on the other hand have presented rather more succinct accounts which emphasize general tendencies or broad trends (e.g. Canada, Mauritania, Morocco, Union of Soviet Socialist Republics, United States of America). It is noteworthy that reports to the present meeting devote considerably more attention to wider wetland policies and issues than reports to earlier meetings.

10. On some issues, Contracting Parties have submitted separate information to the Bureau. Other bodies or individuals have also approached the Bureau with information. Where appropriate, such information is mentioned in the present review.

11. The format of the present review follows the headings of the 'Outline for national reports'.

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## **II. BASIC INFORMATION ON MEASURES TAKEN BY CONTRACTING PARTIES**

### **Contracting Parties to the Convention**

12. The List of Contracting Parties to the Convention and the date when the Convention came into force for them is being updated continually and can be obtained from the Bureau upon request. Some (e.g. Guinea-Bissau and Venezuela) have recently deposited with

UNESCO an instrument of acceptance of the Paris Protocol rather than an instrument of accession to the Convention itself. This procedure means that the country concerned still becomes a Contracting Party to the Convention (as amended by the Protocol), which comes into force immediately (following Article 10 bis, paragraph 6) rather than after a delay of four months (Article 10 paragraph 2).

13. Some countries (e.g. Egypt and Mali) deposited an instrument of accession to the Convention, without providing at the same time a description and map of the wetland or wetlands designated for the List of wetlands of international importance. This delayed the process of them becoming a Contracting Party. Others (e.g. Bolivia, Guatemala and Panama) have not yet provided a description and map of their wetland, and so are not yet considered to be Contracting Parties. Workshop B will discuss whether the map and description can be provided subsequently, and the plenary session will be asked to approve a Conference recommendation to clarify this issue.

14. At the time of the Regina meeting there were 45 Contracting Parties to the Convention. There are now 54. Since mid 1987 therefore nine countries have become Contracting Parties - Chad, Egypt, Ghana, Guinea-Bissau, Malta, Nepal, Uganda, Venezuela and Vietnam; three others - Bolivia, Guatemala and Panama - have deposited their instrument of accession, but have not yet designated a wetland for the List. The following paragraphs attempt to place the list of Contracting Parties in a world wetland conservation context.

15. WESTERN PALEARCTIC: The biogeographical region most strongly represented among the Convention's member-states has until now been the Western Palearctic. A Cagliari recommendation called for rapid completion of the Western Palearctic network. The accession of Egypt and Malta in the last three years brings this Western Palearctic network nearer to completion. Of the remaining countries in this biogeographical area, the Bureau has been in contact with Czechoslovakia, Luxembourg, Rumania and Turkey, and understands that all four intend to join, possibly by the time of the Montreux meeting. The Ramsar Standing Committee has identified the Mediterranean as a priority area for the Convention, and the Mediterranean regional workshop, held in collaboration with the Council of Europe and the Spanish authorities in November 1989, allowed contacts not only with Turkey, but with Cyprus which also expressed interest in becoming a Contracting Party.

16. AFRICA: The Regina meeting approved a recommendation (C.3.6) requesting the Bureau to approach the authorities of several African countries (particularly those represented at Regina as observers), with a view to them becoming Contracting Parties. Of the countries represented as observers there, Chad, Egypt, Ghana and Uganda are now

Contracting Parties, and Kenya and Zambia are likely to join in the very near future. Guinea-Bissau has recently joined the Convention, following a series of contacts where IUCN played a major role. There are however still only 14 Contracting Parties in this large region: Egypt, Tunisia, Algeria, Morocco and Mauritania in North Africa; Senegal, Guinea-Bissau, Mali, Niger, Chad, Ghana and Gabon in West Africa; only Uganda in East Africa and the Republic of South Africa in Southern Africa. The Standing Committee has identified the Mediterranean and the Sahel as priority areas. If the Convention is to be fully active in Africa, there is clearly a need to recruit more member countries, particularly in eastern and southern Africa. A number of African states will be represented by observers at Montreux and it is hoped that they will in the near future become Contracting Parties.

17. SOUTHERN AMERICA: A similar recommendation (C.3.7) was approved by the Regina meeting on the subject of 'Further Contracting Parties in Central America, the Caribbean and South America'. Of the states represented as observers at Regina, Venezuela has since become a Contracting Party. As noted above, Bolivia, Guatemala and Panama have deposited instruments of ratification, but have not designated a wetland for the List. At present therefore, Chile, Suriname, Uruguay and Venezuela are Contracting Parties, but there are no Contracting Parties in the Caribbean, nor in Central America, despite the efforts of the Bureau, other interested Contracting Parties and partner organizations such as IUCN and WWF. Once again there is a need to persuade more countries to join; several of those who are interested will be represented by observers at Montreux.

18. ASIA: Regina Recommendation C.3.10 referred to further Contracting Parties in Asia and the Pacific, and the Ramsar Standing Committee identified southeast Asia as a priority area. Since Regina, Nepal and Vietnam have become Contracting Parties, and several southeast Asian states are believed to be close to joining. The present Contracting Parties in Asia (the continent that gave birth to the "Ramsar" Convention) are: Jordan, Pakistan and Iran in western Asia; India and Nepal in central Asia; and Japan and Vietnam in eastern Asia; in addition much of the USSR's territory is of course also in Asia. A "Directory of Asian Wetlands", compiled by D A Scott for WWF, IUCN, ICBP and IWRB has recently been published and represents a valuable guideline on potential Ramsar sites. Again there is clearly a need for further promotion.

19. OCEANIA: The two Oceanian Contracting Parties are Australia and New Zealand. The Oceania Wetland Inventory, currently under preparation with support from a number of Contracting Parties, will provide publicity for the Convention among the island states of the region.

20. **NORTH AMERICA:** In North America, all three of the (admittedly very large) countries concerned, Canada, Mexico and the USA, are already Contracting Parties.

### **Reasons for joining the Convention**

21. The preceding paragraphs make it clear that there are still broad gaps in the global coverage achieved by the Ramsar Convention, particularly in the developing countries of Africa, Asia and Southern America. Much further promotional work will obviously be necessary by Contracting Parties, Standing Committee, Ramsar Bureau, partner organizations and non-governmental bodies. It seems appropriate here to set out for their guidance the reasons for joining the Convention.

22. **WETLAND BENEFITS AND VALUES:** The Ramsar Working Group on Wise Use, established at Regina, defined in its report the values and functions which justify conservation of wetlands. These go far beyond the waterfowl habitats mentioned in the title of the Convention, and are as follows:

- sediment and erosion control
- flood control
- maintenance of water quality and abatement of pollution
- maintenance of surface and underground water supply
- support for fisheries, grazing and agriculture
- outdoor recreation and education for human society
- provision of habitat for wildlife, especially waterfowl
- contribution to climatic stability

23. These benefits and values are undoubtedly of relevance to all states, and indeed Parties to the Convention include states from all longitudes and latitudes, with all types of political organization and every possible degree of economic and social development. Furthermore the national reports reflect the increasing concern for environmental issues felt at all levels since Regina: the Australian report notes that the Australian Prime Minister's "Statement on the Environment of July 1989" has "direct implications for the conservation and management of wetlands"; the US report refers to the "February 9 Budget Address to Congress" in which the US President "set no-net-loss of wetlands as a national goal"; the Tunisian government, in inviting the Bureau to an international seminar, noted that "the new policy of the Tunisian authorities on development matters consists in taking real and practical account of ecological and environmental issues".



**24. HOW CAN AN INTERNATIONAL CONVENTION HELP?** When the benefits and values mentioned in paragraph 22 are shared between several states, international cooperation is required. The Ramsar Convention provides the global framework for cooperation in the field of conservation and wise use of wetlands. Specific ways in which Ramsar can help may be summarized as follows:

- In a world increasingly concerned with environmental issues international cooperation and solidarity can be demonstrated by membership of the four global conservation conventions - Ramsar (the oldest!), World Heritage, CITES and Bonn. Wetland benefits and values are shared between nations in the case of cross-frontier wetlands, shared river systems and migratory bird flyways. Cooperation and consultation is necessary on these issues.
- Participation in meetings at the highest level (the Conference of the Parties) means that a Contracting Party can influence world decisions on wetland conservation and wise use.
- Designation of sites for the 'List of wetlands of international importance' gives them recognition and publicity at international, rather than national level.
- Through the contacts with international and national development agencies (whether by Contracting Parties or the Bureau) there are possibilities of finance for wetland projects in developing countries.
- Exchange of the latest information and advance can be promoted through conferences, specialist meetings, missions or direct requests to the Bureau.

25. The cost of attending Conferences of the Contracting Parties, meetings of the Standing Committee and specialist meetings may prove to be a major problem for many developing countries. An item in the Convention budget is set aside for travel and subsistence of delegates from developing countries. It should be emphasized that at the present meeting, extremely generous extra grants have been made to the Bureau for this purpose by Canada, Denmark, Federal Republic of Germany, Netherlands, Norway, Sweden, Switzerland, USA; UNEP and UNESCO; IUCN and WWF; and the Mekong Secretariat.

### **Acceptance of the Paris Protocol**

26. The Paris Protocol was adopted at an Extraordinary Conference held at UNESCO headquarters in Paris in December 1982. It introduced two important technical changes to the text:

- all language versions became of equal value; and
- an article on amendments (Article 10 bis) was incorporated.

At the time of the Extraordinary Conference, there were 32 Contracting Parties. The Protocol came into force after two-thirds of them (i.e. 22 states) had deposited an instrument of acceptance with UNESCO.

27. Iceland was the twenty-second Contracting Party to accept the Paris Protocol, which came into force on 1 October 1986. Since then seven more of the original 32 Contracting Parties have accepted the Protocol, three of them (Greece, Italy and Japan) since the Regina meeting. Mauritania has also deposited its instrument of acceptance of the Paris Protocol since Regina. All new Contracting Parties from 1 October 1986 onwards have joined the Convention as amended by the Paris Protocol.

28. As a result, 46 of the 54 Contracting Parties have now accepted the Protocol. The national reports include information on the Protocol in some of the remaining eight Contracting Parties. The national report from Belgium indicates that the procedure for approbation of the Paris Protocol is under way. The report from the German Democratic Republic indicates that the Paris Protocol has "not yet" been approved. The report from Suriname says that "the instrument of accession to this Protocol will be submitted .... in the near future". The report from the USSR states that "this question is being reviewed by the USSR government". The reports from Algeria, Austria and Uruguay do not mention this question; no report has as yet been received from Yugoslavia. Recent contacts between the Ramsar Bureau and Austria, German Democratic Republic and USSR indicate that these three Contracting Parties are likely to accept the Paris Protocol in the near future.

29. It would greatly simplify the administration of the Convention and increase its effectiveness if the outstanding eight Contracting Parties could accept the Paris Protocol.

### **Acceptance of the Regina Amendments**

30. An Extraordinary Conference of the Contracting Parties was held at Regina, Canada in 1987, in addition to the third ordinary meeting of the Conference of the Parties. The Extraordinary Conference adopted amendments to Articles 6 and 7. The amendments to Article 6 revised the provisions concerning the powers of the Conference, including adoption of the budget. The amendment to Article 7 relates to voting rights at Conference.

31. These amendments (following Article 10 bis) will come into force when accepted by two-thirds of the Contracting Parties at the time of the Regina meeting. Since there were 43 Contracting Parties at that time, the Regina amendments will come into force when adopted by 30 of them.

32. The ordinary Conference at Regina approved a 'Resolution on Provisional implementation of the Amendments to the Convention' (Regina Proceedings page 113) which "URGES the Contracting Parties to implement on a provisional basis the measures and procedures envisaged by the amendments adopted by the Extraordinary Conference of the Contracting Parties ... until such time as they come into force".

33. Eight of the 43 Contracting Parties - Bulgaria, Canada, Finland, Japan, Norway, Pakistan, Sweden and Switzerland - have deposited an instrument of acceptance of the Regina amendments with UNESCO. The amendments are therefore not yet legally in force. However, many Contracting Parties which have not yet deposited an instrument of acceptance have followed the Regina resolution and implemented the amendments on a provisional basis, notably as regards financial contributions to the Ramsar budget.

34. Many national reports also present comments on the Regina amendments. The comments are without exception extremely positive, and indicate the intention of the Contracting Party concerned to deposit an instrument of acceptance with UNESCO as soon as possible. Thus, Australia is currently preparing administrative and legal documents to allow acceptance. The procedure for approval is under way in Belgium. The German Democratic Republic has "not yet" accepted the Regina amendments. The government of the Federal Republic of Germany has initiated acceptance of the amendments. In Greece the preparatory procedure to present the Regina amendments to Parliament has not yet been finalized. The Irish report indicates that the Regina amendments have already been accepted (though an instrument of acceptance does not appear to have been received by UNESCO). The Mexican report speaks of "tacit approval" and notes that financial contributions have been made. The Netherlands is in the process of ratifying, while New Zealand has "not yet" accepted the Regina amendments. Portugal says that the process of acceptance is under way. South Africa intends to accept these amendments and the process of ratification has been initiated. Suriname awaits government approval, while in the United Kingdom the process of ratification is proceeding as quickly as possible and should be completed before the Montreux Conference.

35. In addition to the above written comments from the national reports, the Bureau has been in contact with a number of other Contracting Parties, and understands that the Regina amendments are likely to be accepted by them in the near future. This is the case, in particular, with the USSR.

36. Entry into force of the Regina amendments is highly desirable for the efficient administration and financial stability of the Convention. It is very much to be hoped that 30 of the first 43 Contracting Parties will deposit instruments of acceptance with UNESCO as

soon as possible. Once the Regina amendments are in force, no further amendments should be necessary, since the Conference of the Parties will then be competent to adopt resolutions, recommendations and decisions to promote the functioning of the Convention.

### **Administrative authorities responsible for implementing the Convention**

37. In general, final responsibility for implementation of international conventions is vested in the Foreign Ministry of the Contracting Party concerned. For this reason, Bureau notifications and invitations to conferences are sent through diplomatic channels. Similarly, credentials for the Conference of the Parties are normally signed by the Foreign Minister.

38. For regular, day-to-day contacts, however, an administrative or technical ministry or other body is normally in charge. Most Contracting Parties have appointed a specific body to carry out these duties, and the list is given in document INF. C.4.5. The Bureau particularly requests delegates of Contracting Parties to check and, where appropriate, correct and complete these (particularly as regards telephone, telex and telefax numbers). In some cases, communications with Contracting Parties have been delayed since the Bureau was not aware of the correct administrative authority, or because telephone, telefax or telex numbers were not available.

### **Current status of the List of wetlands of international importance**

39. One of the principal obligations accepted by a Contracting Party to the Ramsar Convention is to "designate suitable wetlands within its territory for inclusion in a List of wetlands of international importance" (Article 2.1). One of the principal tasks of the Ramsar Bureau is "to maintain the List of wetlands of international importance" (Article 8.2(b)).

40. The Bureau maintains the List with the help of the World Conservation Monitoring Centre (WCMC), Cambridge, UK. Updated versions of the List are circulated with the Bureau's Annual Report. A new version has been prepared for the present meeting (document INF. C.4.3) using information supplied in the national reports. The latest version of the List has been stripped to the very bare essentials, since a new version of the "Directory of wetlands of international importance" which gives much greater detail has also been prepared for the present meeting (document INF. C.4.4). The Bureau, on behalf of the Contracting Parties, wishes to thank WCMC and its staff for their efforts in this field.

41. On the opening day of the Regina meeting the List included 363 wetlands in 45 countries. At present the List stands at 489 wetlands in 54 Contracting Parties, covering an area of over 30 million hectares (or 300,000 square kilometres, roughly equivalent to the

total surface area of Italy or the Philippines). The states which have become Contracting Parties since Regina have designated ten wetlands for the List as follows:

- Chad: 1 wetland covering 195 000 hectares,
- Egypt: 2 wetlands covering 105 700 hectares,
- Ghana: 1 wetland covering 7 260 hectares,
- Guinea-Bissau: 1 wetland covering 39 098 hectares,
- Malta: 1 wetland covering 6 hectares,
- Nepal: 1 wetland covering 17 500 hectares,
- Uganda: 1 wetland covering 15 000 hectares,
- Venezuela: 1 wetland covering 9 968 hectares,
- Vietnam: 1 wetland covering 12 000 hectares

42. The major increase in wetlands on the List, however, has come from designation of 116 additional wetlands by 16 existing Contracting Parties, as foreseen under Article 2.5 ("Any Contracting Party shall have the right to add to the List further wetlands situated within its territory, to extend the boundaries of those wetlands already included by it in the List"), as follows:

- Australia: 12 wetlands covering 2 183 771 hectares
- Canada\*: 13 wetlands covering 2 591 135 hectares
- Denmark (Greenland): 11 wetlands covering 1 044 500 hectares
- Hungary: 5 wetlands covering 81 141 hectares, (plus extension of 1 wetland already listed)
- Iceland: 1 wetland covering 37 500 hectares
- India: 4 wetlands covering 73 600 hectares
- Ireland\*: 16 wetlands covering 7 817 hectares (plus extension of 3 wetlands already listed)
- Italy: 5 wetlands covering 2 982 hectares
- Japan: 1 wetland covering 4 321 hectares (plus extension of 1 wetland already listed),
- Netherlands: 3 wetlands covering 7 175 hectares
- New Zealand: 3 wetlands covering 23 155 hectares
- South Africa: 1 wetland covering 6 000 hectares
- Spain: 14 wetlands covering 46 495 hectares
- Sweden: 10 wetlands covering 130 145 hectares (plus extension of 2 wetlands already listed)
- United Kingdom: 13 wetlands covering 6 719 hectares (plus extension of 1 wetland already listed)
- USA\*: 4 wetlands covering 764 869 hectares

(\*NB Designation of 11 of the additional Canadian wetlands and three of the Irish sites, and two of the US sites was announced at the Regina meeting.)

43. As previously noted at Regina, the tendency for existing Contracting Parties to add further sites to the List is accelerating, and at an ever-quicken pace. Including sites added before Regina, the following 22 Contracting Parties have now added sites to the List:

- Australia (on ten occasions, four since Regina; wetlands in all Australian states except Queensland have now been designated for the List)
- Bulgaria (on one occasion, before Regina)
- Canada (on five occasions, three since Regina; wetlands in all Canadian provinces and territories have now been designated for the List, following the designation of a site in Prince Edward Island)
- Denmark (on two occasions, once since Regina; the 11 sites designated since Regina are all in Greenland)
- Federal Republic of Germany (on one occasion, before Regina; wetlands in all the Länder of the Federal Republic except Berlin, Bremen, Hamburg, Saarland and Schleswig-Holstein),
- Hungary (on one occasion, since Regina)
- Iceland (on one occasion, since Regina),
- India (on one occasion, since Regina)
- Ireland (on seven occasions, six since Regina),
- Italy (on 12) occasions, two since Regina),
- Japan (on two occasions, one since Regina),
- Netherlands (on four occasions, two since Regina),
- New Zealand (on two occasions, both since Regina),
- Norway (on one occasion, before Regina),
- Poland (on one occasion, before Regina),
- Senegal (on two occasions, before Regina),
- South Africa (on two occasions, once since Regina)
- Spain (on two occasions, one since Regina),
- Sweden (on one occasion, since Regina),
- Switzerland (on one occasion, before Regina),
- United Kingdom (on nine occasions, twice since Regina),
- United States of America (on three occasions, since Regina)

44. It is clear from paragraphs 42 and 43 that many Contracting Parties are continually adding new sites to the "List of wetlands of international importance". Twenty-two of the 54

Contracting Parties have added extra sites after their initial accession, 16 of them since Regina. In some cases, Contracting Parties have used the Ramsar criteria, particularly those relating to waterfowl, to produce a list of potential Ramsar sites. As noted in the Regina overview (C.3.6 page 197) the Netherlands has identified 103 sites which meet the criteria, and UK has produced a similar list, under constant revision, covering well over a hundred sites. The Bureau has taken part in meetings organized by the Spanish government, which have discussed a list of potential Spanish Ramsar sites, numbering some 60 wetlands.

45. It may be recalled that Recommendation 1.4 of the Cagliari meeting of the Conference called for a "shadow" list of wetlands qualifying under the criteria to be maintained by appropriate international organizations, both for Contracting Parties and for States which are not yet Contracting Parties. As a contribution to this "shadow " list, ICBP and IWRB have produced a version of their "Important Bird Areas" volume, listing European wetlands which meet the Ramsar criteria. An English version will be available at Montreux.

#### **Additions to the List proposed at previous meetings and in reports to the present meeting**

46. In the national reports presented to previous meetings and in plenary sessions of these meetings, several Contracting Parties indicated their intention of designating additional sites for the Ramsar List. The national reports presented to the present meeting also include numerous references to additional listings. In the following paragraphs, progress made in this matter is reviewed.

47. ALGERIA: The national reports presented at Groningen and Regina indicated that reserves would be established at Garaet Mekhada and the Macta marshes, and that both sites would be designated for the List. The national report for Montreux does not mention these two sites, which have not yet been listed under Ramsar.

48. AUSTRALIA: The Australian report to Regina mentioned three sites where nominations for Ramsar were being prepared and the Australian report to the present meeting refers to a further nine in Western Australia. All 12 have now been designated.

49. AUSTRIA: The Austrian national report to Regina mentioned the intention to designate the Gralla Reservoir. This has not yet been listed.

50. BOLIVIA: The Bolivian observer at Regina expressed the hope that Bolivia would soon become a Contracting Party and referred to problems at Laguna Colorada. As noted in

paragraph 17 above, Bolivia has deposited an instrument of accession but has not yet designated a wetland for the List.

51. CANADA: The Canadian national report for the present meeting indicates that discussions are under way to designate four sites in Canada, in addition to the 30, covering nearly 13 million hectares, which have already been designated.

52. CHAD: At Groningen and Regina, the observer from Chad indicated that his country intended to become a Contracting Party and to designate Lake Fitri and parts of Lake Chad. (Groningen Recommendation 2.9 made specific reference to Lake Chad, which is shared by Cameroon, Chad, Niger and Nigeria.). Chad's instrument of accession was deposited just before the Montreux Conference, and Lake Fitri was designated. The Bureau understands that the procedure for Chad's accession has been completed internally, and deposit of an instrument with UNESCO may occur by the time of the Montreux Conference.

53. COSTA RICA: The Costa Rican observer at Groningen indicated that his country was ready to join, and that two wetlands covering 18,000 hectares would be designated. The Bureau understands that the procedure for Costa Rican accession is well advanced.

54. FINLAND: The Finnish national report to Regina (Proceedings page 449) indicated that Finland "is considering the addition of over 30 new areas to the List of wetlands of international importance". These sites have not yet been listed.

55. FRANCE: The French national report to Regina (Proceedings page 452) indicated that France intends to continue the process of designating further wetlands for the List. The Bureau understands, in contacts with the French authorities, that much progress has been made. (Groningen Recommendation C.2.9 made specific reference to the Marais de l'Ouest.)

56. FEDERAL REPUBLIC OF GERMANY: The report of the Federal Republic of Germany to the Groningen meeting indicated that certain areas of the Wadden Sea in Schleswig-Holstein would be suitable for designation, and Recommendation 2.5 of that meeting called on the Federal Republic to designate for the List the parts of the Wadden Sea under its jurisdiction. As yet no wetlands in Schleswig-Holstein have been designated.

57. The national report to the Groningen Conference also indicated that Kühkopf-Knoblochsaue in the state of Hessen was under consideration for listing. It has not yet been designated.



58. The Federal Republic's national report to the present meeting indicates that a new area, the reserve of Lampertheimer Altrhein which covers 525 hectares in Hessen, is to be designated. The report also indicates that the existing "Unterer Niederrhein" Ramsar site is to be extended by the addition of two areas covering in all 700 hectares. These are the proposed nature reserves on the Rhine foreshore at the Orsoy bend of the Rhine (425 hectares) and at Hetter/Millinger Bruch (260 hectares). These extensions have not as yet been notified to the Bureau, with the amended maps and descriptions.

59. HUNGARY: The Hungarian report to Regina indicated that Lake Tata and four other wetlands of international importance were to be designated for the List. Four of these (Lake Tata, Lake Balaton, Kisbalaton storage lake and Lake Fertő) were added to the Ramsar List on 17 March 1989. Two of them, Lake Tata and Lake Balaton, are to be "part-time" Ramsar sites, from 1 October to 30 April, on the grounds that they are of no importance for waterfowl in the summer. Some concern has been expressed that changes in ecological character could occur to these Ramsar sites during the summer period when they are not covered by Ramsar designation. The Hungarian delegation will be presenting on a paper on this issue in Workshop D on listed sites. The fifth site mentioned in the Hungarian report to the Regina Conference, Biharugra fish ponds, has not yet been designated for the List.

60. INDIA: The Regina review (paragraph 125 page 221) referred to information about possible designation of three new sites. Following a visit to India by the Secretary-General in February 1990, four new sites were designated in March.

61. IRELAND: The Irish report to the present meeting refers to the proposed listing of six new sites. All six have now been designated and three existing sites have been extended; the Bureau awaits the maps of the new and extended sites.

62. ITALY: Since Regina, Italy has listed five new sites, one in Sicily (mentioned in the summary record of the Groningen Conference C.2.4 page 12) in 1988, followed by four in 1989 (respectively in Sicily, Veneto, Lombardia and Calabria). With these five new sites, the number of Ramsar wetlands in Italy has risen to 45, more than any other Contracting Party. Groningen Recommendation C.2.9 made specific reference to appropriate conservation action, including Ramsar listing, in the Venice Lagoon, the northern part of the Po Delta and Lake Trasimene. These three areas have not yet been listed.

63. MAURITANIA: At the Groningen meeting, the Mauritanian delegate indicated Mauritania's intention of designating a further site on the River Senegal covering 12,000 hectares; Groningen Recommendation C.2.8 called for establishment of a protected area, including an artificial estuary in the Mauritanian part of the Senegal estuary.

Recommendation C.2.9 called for appropriate conservation action, including listing, at Lake Aleg and Lake of Mâl in Mauritania. No new Mauritanian designations have as yet been made.

64. The Mauritanian report to the present meeting points out that other potential Ramsar sites in Mauritania include Diawling (in the Senegal estuary) where a proposal to establish a national park is well advanced, Lake Aleg, Lake of Mâl, the dam on the Gorgol Noir, Tamourt-en-Naaj and the Aftout-es-Sahel. The report however emphasizes that socio-economic problems related to their exploitation will have to be overcome, and that the solutions to these difficulties definitely lay outside the field of conservation.

65. MOROCCO: Groningen Recommendation C.2.9 called for conservation action, including where possible listing under the Ramsar Convention, at Oued Massa in Morocco. Though this site has not yet been designated for the List, the Moroccan report to the present meeting indicates that "with the creation of the Souss-Massa National Park, funds will be made available by WWF international for conservation and wise use of the park area which covers the estuary of the Oued Souss and the Oued Massa".

66. NETHERLANDS: It was indicated at Groningen that the Netherlands government would take full account of the importance of the Markermeer before a decision was taken on the future of the area. At Regina it was stated (Proceedings page 51) that the polderization project for the Markermeer had been deferred. The Netherlands report to the present meeting does not refer to the Markermeer.

67. In a communication to the Bureau received after submission of the national report, the Netherlands authorities indicate that the procedure for designation of Verdronkene Land van Saeftinghe (as proposed in Monitoring Report No 1 on Galgenschoor (see paragraph 162 below) will be initiated.

68. PAKISTAN: The Pakistan report to the Regina meeting pointed out that some of its wetlands, listed in 1977 before formal adoption of the Ramsar criteria, did not appear to meet the criteria adopted by the Contracting Parties. A major reappraisal of Pakistan's wetlands had therefore been carried out (Regina Proceedings pages 199 and 224). Following operation of the Ramsar Monitoring Procedure in Pakistan in May 1990, it is understood that Pakistan proposes to remove from the List a small number of minor wetlands covering just over 1,000 hectares, and to compensate by listing several major sites covering over 15,000 hectares.

69. POLAND: The Polish report to the Regina meeting indicated that of 114 wetlands surveyed in Poland, 21 meet Ramsar criteria. The report of the "International Conference on the protection and management of wetlands and waterfowl in East European Region", held at Gdansk in close cooperation with the Ramsar Bureau in September 1989, called on the Polish authorities to designate the wetlands included in the document prepared by the Polish section of ICBP and IWRB as soon as possible; the report makes special reference to designation of the River Biebrza valley - the largest remaining marsh in Central Europe - and the whole of the Slowinski National Park.

70. The Polish report to the present meeting indicates that consultations are under way to extend the area of the Siedem Wisp reserve, designated for the Ramsar List in 1984. No other additional sites have so far been designated in Poland, but under "Tasks in the course of implementation" the national report states that work is underway to establish the Biebrza National Park, and that the Ministry intends to designate it for the Ramsar List; a document has been prepared explaining the need to include the Slowinski and Biebrza National Parks as well as the Milicz Pond on the Ramsar List.

71. PORTUGAL: The Portuguese national report at Groningen indicated that it was proposed to designate an area of 22,700 hectares on the Sado River, to acquire 5,000 hectares at Quinto do Ludo in the Ria Formosa Ramsar site and to acquire another important wetland, Paul de Boquilobo. The supplement to the Portuguese report to Regina noted that, while progress had been made at all three sites, conservation measures necessary at national legislation before designation had not been completed.

72. The Portuguese report to the present meeting refers to five sites which meet criteria for international importance based on waterfowl populations. The report says that four of these - the natural reserves of the Sado Estuary, Paul de Boquilobo, Paul de Arzila and Sapal de Castro Marim - should all be designated for the Ramsar List before the end of 1990. The fifth (Ria d'Aveiro) has not yet received protection under national legislation.

73. SURINAME: The Suriname report to the present meeting indicates that proposals to list two important coastal wetlands have been submitted to the government. In addition to the Coppename Rivermouth (designated for the Ramsar List already) two other wetlands in Suriname, Wia Wia and Bigi Pan, have been gazetted under the Western Hemisphere Shorebird Reserves Network.

74. SWEDEN: The Swedish national report to Regina indicated that a revision of internationally important wetlands was under way and that the number of Ramsar sites would increase from 20 to 26. In fact Sweden listed ten new sites, and extended two

existing sites, in 1989. The report to the present meeting points out that by these extensions, three new wetland habitats have been represented in Sweden, namely oligotrophic lakes, marine archipelagos and river deltas.

75. SWITZERLAND: The Swiss national report to Regina indicated that the 1986 federal law on hunting and protection of mammals and birds would enable wetland reserves to be created and designated for the Ramsar List. As yet, no new Ramsar sites have been listed, but the Swiss report to the present meeting refers to a separate 1989 order which allows the Federal Council to establish internationally important waterfowl reserves, which could also be listed under Ramsar.

76. TUNISIA: Groningen Recommendation C.2.9 called for conservation action, including where possible Ramsar designation, for the Gulf of Gabés. The site has not been listed.

77. USSR: The USSR report to the present meeting does not refer to the possibility of additional wetlands to be designated for the List. However, in meetings with the competent authorities in the USSR, Bureau staff have been informed of proposals to make very large extensions to present USSR listings.

78. UNITED KINGDOM: At Groningen, the UK delegation stated that 132 wetlands eligible for designation had been identified and that nearly all would be listed by 1986. The UK report to Regina indicated that designation was a time-consuming process and that notification of Sites of Special Scientific Interest (a necessary prerequisite for Ramsar designation) had been slower than estimated at Groningen. The UK report to the present meeting notes that, as of 30 January 1989, a total of 154 sites qualifying for Ramsar status had been identified. Of these 44 have been designated and incorporated into the List.

79. The UK report to Regina also indicated (Regina Proceedings pages 197 and 562) that consideration was being given to designation of Ramsar sites in the UK dependent territories of Bermuda, Cayman Islands and Turks and Caicos Islands. No sites in these territories have as yet been listed.

80. UNITED STATES OF AMERICA: The US national report to Regina indicated that additional listings were being prepared for Regina. In fact, two new US sites were designated at the Regina meeting, and two more have been listed since.

81. URUGUAY: The national report to Regina referred to the Laguna de Rocha as a wetland of international importance. No further Uruguayan wetlands have been designated.

82. VENEZUELA: The Venezuelan observer at Regina indicated that on accession, a coastal site covering 8,000 hectares would be designated. This site, the Cuare Reserve, was added to the List when Venezuela joined in 1989.

83. YUGOSLAVIA: The Regina overview (Regina Proceedings page 226) refers to the possibility that wetlands in republics or autonomous provinces other than Vojvodina might be designated for the Ramsar List. So far, no additional wetlands have been listed.

### **Maps of designated wetlands**

84. As noted in the Regina overview (Regina Proceedings 197-198), it is important with the increasing pace of designation to recall the requirements of Article 2.1: "Each Contracting Party shall designate suitable wetlands for inclusion in a List of wetlands of international importance ..... The boundaries of each wetland shall be precisely described and delimited on a map". Unless the boundaries of designated wetlands are precisely described and mapped, it is impossible to judge whether their ecological character has been affected "as a result of technological developments, pollution or other human interference" (Article 3.2). Contracting Parties have for the most part been scrupulous in providing maps and descriptions of sites. However, in a few cases, detailed in the following paragraphs, difficulties have arisen.

85. GREECE: When it deposited its instrument of ratification to the Convention in 1975, Greece appended a map of the country giving a general indication of the situation of the eleven wetlands designated for the List. As noted at Cagliari, even this general indication made it possible to take some measures at the sites concerned. Furthermore, the second number of the Ramsar Newsletter (October 1988) carried a report indicating that the Greek Council of State had prohibited the establishment of a shipbreaking yard in the Nestos Delta (one of the Greek Ramsar sites) even though the precise boundaries had not been delimited. After the Regina meeting, the Greek authorities submitted a revised national report, which included indicative maps of the eleven sites, with proposed boundaries and zoning of permitted activities.

86. In the period since Regina, the Bureau has cooperated closely with the Greek authorities in this matter in the framework of the Monitoring Procedure (see paragraphs 165 to 166 below). However, as noted in the Greek national report, "the first stage of the zoning determination has not been completed, despite the efforts of the competent authority. The consensus procedures, which were selected as the best way to ensure the protection of wetlands, have not been successful; on the contrary, they turned out to be more difficult and time-consuming than expected". The Greek report does however indicate that the legal

boundaries of the Mikra Prespa National Park have been defined. A map of the Mikra Prespa Ramsar boundaries has not yet been submitted to the Bureau.

87. MOROCCO: In Morocco, as in Greece, the documents deposited with UNESCO at the time of accession included a general map of the country, on which the position of the four Ramsar sites was shown, but not their precise boundaries. The Bureau has drawn the attention of the Moroccan authorities to the matter and requested more detailed maps. The Moroccan national report to the present meeting does not mention the specific matter of maps; however it indicates that the four sites "continue to enjoy the necessary protection", that one of them is a "classified natural site" and that the law on protection of nature which is currently in preparation will improve legal conservation measures.

88. NETHERLANDS: At the time when the Netherlands became a Contracting Party in 1980, it designated twelve wetlands for the List, six in its European territories, six in the Netherlands Antilles (five on Bonaire, one in Aruba). Detailed maps and descriptions of the six European sites were submitted at that time; for the Antilles wetlands (still the only Ramsar sites in the Caribbean) written descriptions were provided, but not maps.

89. In view of the difficulty of monitoring change in ecological character without detailed maps, it appears highly desirable to request the Contracting Parties concerned to provide detailed maps of the Ramsar sites concerned as soon as possible. Clearly it is important for any new designations to be accompanied by detailed maps.

### **Contributions to the Ramsar budget**

90. The 'Outline for national reports' invited Contracting Parties to provide information on contributions made to the Ramsar budget (core budget, support in kind, project support). Since this information is presented in other Conference documents (notably C.4.5), it is not repeated here. In general, it is clear that the great majority of Contracting Parties have paid their financial contributions, several paying more than the amount requested. As noted in paragraph 25 above, many Contracting Parties and other interested organizations have in addition made special grants to support participation at the present meeting. Some comments from the national reports are presented in the following paragraphs.

91. FEDERAL REPUBLIC OF GERMANY: The national report of the Federal Republic indicates that payments have been made since 1988 and that the Federal Republic always aims to pay its contributions to international organizations in the early part of the year. This latter point is clearly important for efficient operation of the Ramsar Bureau.

92. MAURITANIA: The national report notes that the Mauritanian contribution is "purely symbolical" and suggests two ways it could be settled in future. However the report emphasizes that the international economic recession has severely affected developing countries, and in particular Least Developed Countries like Mauritania. Their operating budgets make it scarcely possible for them to pay contributions to organizations and conventions of which they are members. The report notes that it is desirable to be extremely indulgent with less advanced countries and to ensure that they are not excluded or suspended from international organizations simply for non-payment of their dues.

93. MOROCCO: The Moroccan report indicates that contributions to the Convention budget are a matter for the Foreign Ministry.

94. NETHERLANDS: The national report indicates that financial support for a "wise use of wetlands" project, with a total cost of 900,000 Dutch guilders is being considered. Subsequent communications to the Ramsar Bureau indicate that it has been approved, and a presentation on this subject will be made in Workshop E on Wise Use.

95. SURINAME: The national report notes that "the bad economic situation in the country has made it impossible for the Suriname Government to fulfil its obligation" to make a financial contribution. Since the report was submitted however, the Suriname contribution for 1988 to 1990 has been received.

96. SWITZERLAND: The Swiss report notes that in addition to its ordinary annual contribution to the Convention budget, Switzerland has since 1988 made a voluntary contribution of 100,000 Swiss francs per annum to the Bureau. This is intended in the first instance to support protection of wetlands (particularly in Africa) situated on the flyways of migratory birds protected in Switzerland.

97. USSR: The national report states that "no voluntary contributions have been made. The main attention in the USSR is concentrated on ensuring the conservation, management and study of wetlands in the country".

98. UNITED KINGDOM: In addition to its ordinary contributions, UK has made special grants of £10,000 for publication of the Regina Proceedings and £15,000 for the database.

99. USA: The US Fish and Wildlife Service (USFWS) and World Wildlife Fund-USA have made contributions to the Ramsar budget. USFWS has also provided project monies to support wetland inventories in Asia and the Pacific, and Ramsar-related projects in Tunisia, India, Mexico and the Asian region.

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### **III. FURTHER INFORMATION ON LISTED WETLANDS**

#### **General introduction**

100. Contracting Parties were requested to provide information on listed sites under four headings:

- Deletions or boundary restrictions
- Changes in legal status, degree of protection, or ownership
- Changes in ecological character (including application of the Monitoring Procedure)
- Management

These four topics will be covered in Workshop D, "Listed sites" on Friday 29 June. Document C.4.6 gives a preliminary summary of the comments on these topics in the national reports. The present document is intended to provide a more detailed summary as a support for the workshop's deliberations.

#### **Deletion of wetlands from the List**

101. The Convention provides that "Any Contracting Party shall have the right .... because of its urgent national interests, to delete or restrict the boundaries of wetlands already included by it in the List"; if it does so "it shall at the earliest possible time, inform the organization or government responsible for the continuing bureau duties ... of any such changes" (Article 2.5). However, "where a Contracting Party in its urgent national interest, deletes or restricts the boundaries of a wetland included in the List, it should as far as possible compensate for any loss of wetland resources, and in particular it should create additional nature reserves for waterfowl and for the protection, either in the same area or elsewhere, of an adequate portion of the original habitat" (Article 4.2) (The precise interpretation of compensation is to be discussed in Workshop B).

102. As at Cagliari, Groningen and Regina, it can again be stated that no Contracting Party has ever deleted a wetland from the List. The Bureau has received no notification of deletions, and the national reports received all state that no deletions have taken place. The fact that no wetlands have ever been withdrawn from the List is a clear indication of the elevated status conferred by Ramsar designation. Many instances were cited at Cagliari, Groningen and Regina of how changes in ecological character were avoided because a wetland appeared on the Ramsar List, and the national reports to the present



meeting provide further examples (see paragraphs 337 to 351 below). Contracting Parties clearly consider that maintaining the integrity and character of their Ramsar sites is an issue of major importance.

103. As noted at Regina (Proceedings page 199), the question of delisting a site could occur if a designated wetland proves not to be of international importance. The text of the Convention gives little guidance on how "international importance" is to be determined. Criteria for identifying sites of international importance were not adopted until the 1980 Cagliari meeting; revisions were made at Regina and further revisions are submitted for approval at the present meeting. Although the criteria are formally adopted by a Conference Recommendation, their application remains a matter for each Contracting Party; there is no Convention mechanism to ensure that designated wetlands do actually meet the criteria. As suggested in document C.4.6 (question (i)) it might therefore be appropriate to establish an 'Admissions Procedure', like that which operates in the World Heritage Convention. A committee established by the Contracting Parties could, among other duties, review wetlands designated by Parties and advise on whether or not they meet the criteria.

104. PAKISTAN: A case in point was raised at Regina in the Pakistan national report. As a result, the Monitoring Procedure was applied in Pakistan in May 1990. The report suggests that four of the sites designated by Pakistan in 1977 (before formal adoption of Ramsar criteria) cannot really be described as worthy of global concern; they are Kheski Reservoir, Malugul Dhand, Kandar Dam and Tanda Dam. It is understood that the Pakistani authorities propose to delete these sites from the List and to replace them by twelve new sites which are considerably larger and of undoubted international status.

### **Restriction of the boundaries of listed wetlands**

105. As noted in paragraph 101 above, Contracting Parties may, in their urgent national interest, restrict the boundaries of listed wetlands; if they do so, they should compensate for any loss of wetland resources by creating additional nature reserves.

106. The Regina overview (Proceedings pages 199-200) summarizes boundary restrictions which had taken place up to 1987: Federal Republic of Germany (seven sites with compensatory extensions in most cases), Iran (fairly considerable restrictions at Miankaleh and Shadegan marshes), Italy (restriction at Stagno di Cagliari with extension in compensation) and Norway (restriction at Akersvika, with later extension). The Regina overview also refers to possible restrictions in Belgium, Denmark, Iran, Netherlands and

Uruguay. The following paragraphs review these and other areas where boundary restrictions are mentioned in the national reports.

107. National reports submitted to the present meeting from the following Contracting Parties indicate that no restrictions have been made to listed wetlands: Algeria, Australia, Bulgaria, Canada, Chile, Denmark, Egypt, Finland, German Democratic Republic, Federal Republic of Germany, Hungary, Iceland, Ireland, Japan, Malta, Mauritania, Mexico, Morocco, New Zealand, Poland, Portugal, South Africa, Suriname, Sweden, Switzerland, Tunisia, USSR, United Kingdom, USA, Venezuela.

108. BELGIUM: At Regina (Regina Proceedings page 60) the delegation of Belgium indicated that Belgium was considering reducing the area of the Galgenschoor wetland (part of the Scheldt Estuary Ramsar site) by 27 or 28 hectares, and that the reduction in area would be compensated by establishment of an additional natural area. The national report to the present meeting indicates that part of the Galgenschoor mudflats (30 hectares out of a total of 155 hectares) has been destroyed by the construction of a container terminal on the banks of the River Scheldt. The Flemish Executive decided on 27 May 1987 to compensate for this loss by increasing the area of existing Ramsar site of Blankaart in the wet meadows of the Yzer valley from 160 to 2,360 hectares. These meadows are the first habitats listed under the Convention in Belgium which do not enjoy the status of nature reserve or buffer zone of an existing reserve. On planning maps, these meadows are called "agricultural zones of ecological interest". No specific or additional protection measures have been taken following their designation under the Ramsar Convention.

109. DENMARK: The Danish report at Groningen noted that 30 hectares of the Nakskov and Inner Fiords Ramsar site might be removed from the site. The report to Regina indicated that the deletion was still under consideration and that increased protection would be given to the remaining area (Regina proceedings page 200). The Danish report to the present meeting does not refer specifically to this site, but states that no reduction of the 27 wetlands designated for the List has taken place.

110. The Danish report adds that the boundaries of some areas are to be adjusted in order to make a more appropriate demarcation in the field. The Danish report, as always extremely detailed, provides clear maps showing the present boundaries of the Danish Ramsar site.

111. GREECE: The Greek national report notes that, as the legal boundaries of the designated reports have not yet been defined, no changes have occurred. Nevertheless,

modifications may still occur during the negotiations for determination of boundaries, mainly with regard to the buffer zones.

112. IRAN: At Regina, the Iranian national report noted that Kamijan marshes (part of the Lake Neiriz and Kamjan Marshes Ramsar site) was to be deleted in the urgent national interest because of successive drought. That report also indicated that Yadegarlu Marsh (part of the Shur Gol, Yadergarlu and Dorgeh Sangi Lakes Ramsar site) was to be deleted because of war and drought conditions. It added that in place of these two areas, Cheghakhur and Gandoman would be listed. As yet formal documentation, maps and descriptions of the deletions and compensatory sites have not been submitted.

113. NETHERLANDS: The national report to the present meeting indicates that a small part of the Wadden Sea Ramsar site (two hectares out of a total 250,000 hectares) was withdrawn for construction of a car park.

114. NORWAY: The national report to the present meeting indicates that the boundaries of Grudevatnet Nature Reserve, one of the protected wetlands within the Jaeren Ramsar site, were slightly changed in 1989, to correct earlier misinterpretations of the former border. Some areas were deleted, while other new areas were included. The net result with respect to the total area of the reserve was unchanged.

115. UNITED KINGDOM: When the boundaries of the North Norfolk Coast Ramsar site were amended in early 1989 one area of 274 hectares was omitted on the grounds that it did not merit notification as a Site of Special Scientific Interest, and was therefore not of international status. The overall area of the site was however increased from 5,559 to 7,700 hectares, to include other sections of international value.

116. The national report to the present meeting notes that the scientific value of Abberton Reservoir (designated as a Ramsar site in 1981, with an area of 1,228 hectares) has been re-assessed. It was decided that some 458 hectares of agricultural grazing land had never been of special scientific interest and should therefore be excluded from the renotified Site of Special Scientific Interest. In consequence, the area of the Ramsar site is to be reduced. The UK report notes that since the reduction has not been occasioned by any alteration of the physical or ecological characteristics of the site, it would not appear to fall under the provisions of the Convention requiring compensatory measures to be taken.

117. One of the purposes of operating the Monitoring Procedure at Lough Neagh (see paragraph 173 below) was to advise on possible restriction of boundaries of the Ramsar sites. Such restrictions might arise in connection with the renotification of the Area of

Special Scientific Interest (a process similar to that described in the previous paragraph at Abberton). The Monitoring Procedure report advised against restricting the boundaries. The UK national report to the present meeting does not indicate whether a decision has as yet been taken.

118. The UK report notes that at the Bridgwater Bay Ramsar Site, the Central Electricity Generating Board has applied to construct a third nuclear power station at Hinckley Point, which lies within the Ramsar site. The Board have purchased 29.5 hectares of land which the Nature Conservancy Council regard as adequate replacement (under Article 4.2 of the Convention) if construction goes ahead. The Board would enter into a Nature Reserve Agreement over the 29.5 hectares.

119. URUGUAY: The Uruguayan report to the present meeting notes that no formal modifications have been made to the boundaries of the Bañados del Este, Uruguay's sole Ramsar site. However the report points out that this very large site (325,000 hectares) designated in 1984, includes:

- areas which were not wetlands at the time of the designation;
- areas which were once wetlands but which were modified before the Groningen Conference (in 1984);
- areas which were modified subsequently by private bodies.

The report notes that consideration is being given to designation of other sites in Uruguay, and to redefinition of the boundaries of the site, which is also partly designated as a MAB Biosphere Reserve. Bañados del Este is one of the sites covered by the Ramsar Monitoring Procedure (see paragraph 174 below).

### **Changes in legal status, degree of protection or ownership of listed sites**

120. The Convention states that "each Contracting Party shall designate suitable wetlands within its territory for inclusion in a List of wetlands of international importance" (Article 2.1) and "shall formulate and implement its planning so as to promote the conservation of wetlands included in the List" (Article 3.1). However it does not require that listed wetlands should have any particular legal status or degree of protection. Listing is a recognition of the importance of a site and an undertaking to promote its conservation. This open formulation allows Contracting Parties considerable flexibility in their approach to listing. As noted at Regina (Proceedings page 201) some Contracting Parties have designated areas (often of considerable size) which have no other protected status and may be privately

owned, and where there is little control of land use, with the intention of achieving better protection in the future. This approach is likely to promote conservation of hitherto unsecured sites and, if successful, will in the long term produce improvements in legal status and degree of protection. Recommendation C.3.9 of the Regina meeting "applauded Contracting Parties which have employed Ramsar listing as a means of securing protection for previously unprotected sites".

121. On the other hand, some Contracting Parties have felt that they could not list sites which did not already have some kind of legal protection and where they could not control land use practices. In their case, designation of a wetland for the Ramsar List raises its status from a nationally recognized to an internationally recognized area. Legal status, degree of protection and ownership is less likely to change where this approach is adopted, though conservation could be strengthened for example by making a Ramsar site a national park rather than a nature reserve.

122. In their national reports Contracting Parties were asked to comment on changes in legal status, degree of protection or ownership of listed sites. Naturally such changes are more likely to occur in Contracting Parties such as Canada, Denmark, Federal Republic of Germany or Uruguay which have adopted the approach to listing outlined in paragraph 120. The following paragraphs summarize the comments under this heading in individual national reports.

123. The following Contracting Parties indicate in their national reports that there has been no change to the legal status, degree of protection or ownership of listed sites: Algeria, Bulgaria, Egypt, Finland, German Democratic Republic, Iceland, Ireland, Malta, Mexico, Morocco, New Zealand, Portugal, South Africa, Switzerland, Tunisia, USA, Uruguay and Venezuela.

124. AUSTRALIA: In Tasmania, two listed wetlands, Sea Elephant River and Moulting Lagoon have been upgraded from the status of Conservation Area and now enjoy greater protection as State Reserves. The Tasmanian government is considering similar upgrading for two other listed Ramsar sites, Logan Lagoon and Pittwater-Orielton Lagoon.

125. The Burmah Forest Ramsar site in the state of Victoria, previously a State Forest, became a State Park in December 1987. Nature Conservation and recreation were thereby given higher priority in management of the area.

126. In South Australia, Coongie Lakes were given the status of National Parks and Wildlife Reserve in December 1989. The new Reserve allows for multiple use and includes a

significant portion of the Ramsar site. Negotiations are also under way to establish the Riverlands Ramsar site. Negotiations are also under way to establish the Riverlands Ramsar site as a Reserve.

127. BELGIUM: In October 1988, the Flemish authorities designated 23 Special Protection Areas under the European Economic Community's Birds Directive. All the Ramsar sites of the Flemish part of Belgium were included in this designation, together with several wetlands of international significance which have not yet been designated for the Ramsar List. In March 1989, the Flemish authorities also adopted a decree which makes environmental impact studies obligatory for projects concerning Ramsar sites or Special Protection Areas. This is an important legal recognition of these international instruments.

128. A large part of the Harchies Ramsar site in the Wallon region now enjoys strict protection. At the 535 hectare site, some 400 hectares now belong to the Belgian state or to conservation bodies.

129. CANADA: Although the national report indicates no changes in legal status of Ramsar sites at present, it points out that Canadian governments are currently negotiating with their indigenous populations for large transfers of land ownership and control. In most cases, the actual boundaries of the lands to be transferred are still undetermined, but Ramsar sites may be involved.

130. CHILE: The authorities are considering the inclusion of the Carlos Anwandter Ramsar site under the Ministry of Agriculture's Law 18.362 (published on 27 December 1981, but not yet in force), which establishes a national system of Protected Wild Areas. This key conservation and environment law assigns previously protected areas to specific categories. Although Carlos Anwandter is not at present included in this legal context, three guards from CONAF (the government conservation organization) are assigned to the area.

131. DENMARK: The Danish report, published in booklet form, gives extensive details under each of the 27 sites in Denmark on protective status, ownership and formalized protection measures. For the eleven Ramsar sites in Greenland, the booklet gives more general information. The principal points are highlighted in the following paragraphs, particularly where there are changes from the detailed Danish report presented at Regina.

132. Denmark's policy on listing, expressed at previous meetings of the Conference (and in the volume "The Ramsar Convention on the conservation of wetlands - A legal analysis of the adoption and implementation of the Convention in Denmark" by Veit Koester, IUCN Environmental Policy and Law Paper No 23) is that "the mere inclusion of a wetland on the

List does not imply an actual obligation to place that wetland under a special conservation régime, but simply a duty to manage the site (and other wetlands) in order to maintain their ecological character" (Koester page 12). For this reason, the Danish authorities originally listed large areas under the Convention, and have over the years gradually instituted special conservation orders at the sites, or parts of them. The Danish report to the present meeting notes that these conservation orders predominately concern territorial waters, which form the greater part of the sites designated. At present just over 595,000 hectares out of a total of 740,000 hectares designated for the List are covered by conservation orders. The land area subject to conservation orders has increased from 23,000 to 64,000 hectares between 1980 and 1990.

134. The Danish report gives details of new and proposed conservation orders at Ramsar sites, since the Regina meeting, as follows:

- Laeso: stricter conservation measures introduced in 1989 to reduce human disturbance and agricultural use of salt meadows of Ronnerne; conservation measures for the shallow sea area and small islands south of Laeso under preparation.
- Randers and Mariager Fjords: conservation of 38 hectares of saltmarsh at Sodringholm; final proposals for conservation of 383 hectares of saltmarsh and meadows at Ajstrup Bay.
- Anholt Island: proposal made in 1989 to conserve the eastern tip of Totten Island and surrounding waters.
- Horsens Fjord: proposal for conservation areas near Lerdrup Bugt.
- South Funen Archipelago: conservation of Monnet, covering 122 hectares near Tasinge.
- Karrebaek, Dybso and Avno Fjords: 195 hectares of saltmarsh and reedswamp given conservation order in 1988.
- Waters between Lolland and Falster: conservation order covering 1,145 hectares in 1989.
- Wadden Sea: conservation of 2,500 hectares of reclaimed marshland behind the sea wall in 1988, in order to preserve traditional agricultural use of the polders for the benefit of the fauna and flora.

With the above measures only two Danish Ramsar sites (Waters southeast of Fejo and Femo Islands; Naskov and Inner Fjords) have no special habitat conservation measures, according to the Danish report. At the other Ramsar sites at least part of the area (often the majority) enjoys habitat protection measures.

135. The Danish report also gives details of new Wildlife Reserves established in Ramsar sites since Regina under the Hunting and Wildlife Management Act, which mainly relates to control of hunting. New Wildlife reserves have been established as follows:

- Ulvedybet and Nibe Bredning: An Experimental Wildlife Reserve, covering 9,500 hectares of the 20,304 hectare Ramsar sites, has been established at Nibe Bredning and Gjøl Bredning from 1989 to 1992. It will include no-hunting areas, varying in location from season to season. After 1992, parallel ecological studies will be used as guidelines for conservation and management studies in the area.
- Praesto Fjord: A similar Experimental Wildlife Reserve has been established from 1989 to 1991 at Ulvshale and Nyord (10,000 ha of the 25,960 hectare Ramsar site).
- Randers and Mariager Fjord: Wildlife Reserve proposed but not yet negotiated in the eastern part of Mariager Fjord.

With the above measures only eight Danish Ramsar sites (Stadil and Veststadil Fjords, Hirsholmene, Nordre Ronner, Laeso, Anholt Island, Sejero Bugt, Maribo Lakes and Ertholmene Islands) do not include a Wildlife Reserve.

136. The Danish report notes that hunting from motor boats has been prohibited or restricted by Departmental order, to reduce hunting pressure on waterfowl and disturbance, at the following 14 sites (mainly shallow coastal waters): Stadil and Veststadil Fjords; part of Vejlerne and Logstor Bredning; part of Laeso (in preparation); Randers and Mariager Fjords; Horsens Fjord and Endelave (parts); Naera Coast and Aabelo (parts); South Funen Archipelago (parts); Skaelsor Fjord (parts); Karrebaek, Dybso and Avno Fjords (parts); Nakskov and Inner Fjord (parts); Waters between Lolland and Falster (parts). The prohibition of the use of lead shot pellets for hunting in Danish Ramsar sites will be extended to the Wadden Sea when the 1986 Departmental Order is renewed.

137. All Danish Ramsar sites are also designated under the EEC Birds Directive.

138. The Danish Parliament has recently approved a plan of action to improve the aquatic environment in Danish waters. This will affect the following Ramsar sites: Ulvedybet and Nibe Bredning; Randers and Mariager Fjords; Lillebaelt; South Funen Archipelago; Skaelsor Fjord and Glaeno; Nakskov and Inner Fjords.

139. In accordance with County Regional Plans, establishment of windmills and windmills parks (for power generation) will not be allowed in the following Ramsar areas: Fiil So; Ringkobing Fjord; Nissum Bredning; Skaelsor Fjord and Glaeno; Karrebaek, Dybso and Avo Fjords; Waters southeast of Fejo and Femo Islands; Praesto Fjord; and Waters between Lolland and Falster. In the South Funen Archipelago a proposal by the county authorities to establish windmill parks was overruled by the government.



140. FEDERAL REPUBLIC OF GERMANY: The Federal Republic of Germany also designated for the Ramsar List extensive wetlands which at the time of designation did not enjoy nature reserve status. The national report gives details of new reserves ("Naturschutz- gebiete") established in Ramsar areas since 1987.

- Lower Rhine, North Rhine/Westphalia: total area of Ramsar site 25,000 hectares. The national report lists 25 nature reserves inside the Ramsar site, covering 9,185 hectares (including Hetter/Milliger Bruch, not yet designated - see paragraph 58). Ten of these covering 1,729 ha have been established since the Regina meeting.
- Weserstaustufe Schlüsselburg, North Rhine/Westphalia: total area of Ramsar site 1,550 hectares. The national report lists five nature reserves covering 1,301 hectares, several of which have been extended since Regina. 150 hectares of agricultural land are covered by contracts which ensure that conservation areas are used only from an ecological point of view.
- Bodensee, Baden-Württemberg: total area 1,077 ha (three sections). In the two sections of Wollmattinger Ried and Giehrenmoos, 86.55% of the total area is in public ownership.
- Ammersee, Bayern: total area 6,517 hectares. The Seeholz and Seewiese nature reserve (95 hectares) is partly in the Ramsar site, and has a positive effect on its conservation.
- Lower Elbe, Barnkrug-Otterndorf, Niedersachsen: total area 11,760 hectares. Nature reserve of Asselersand (623 ha) established in July 1988.
- Elbe, Schnackenburg-Lauenburg, Niedersachsen: total area 7,560 hectares. Nature reserve of Untere Seegeniederung (760 ha) established February 1988.
- Diepholzer Moorniederung, Niedersachsen: total area 15,060 hectares. Two new nature reserves totalling 1,350 hectares established late 1988 and early 1989.

141. GREECE: All eleven Ramsar sites have been declared Special Protection Areas under the EEC Birds Directive. The Greek report notes that their protection is thereby considerably strengthened, due to enforcement of European Community legislation. Ownership of areas round the wetlands is not controlled by law.

142. HUNGARY: The Kisbalaton Ramsar site (formerly a strict reserve covering 1,400 ha) was extended to include a vast area of the lake's surface in 1986. The extended area was given the classification of Landscape Protected Area, and an extended Ramsar site covering 14,745 hectares was designated for the Ramsar List in 1989.

143. JAPAN: Kushiro-Shitsugen, Japan's first Ramsar site, was formerly protected under the law concerning wildlife protection and hunting and as a National Monument. In July 1987 an area of nearly 27,000 hectares was designated as Japan's 28th National Park. The national park incorporates the whole of the Ramsar site, extended from 5,012 ha to

7,726 ha in June 1989; 84% of the Ramsar site is in the Special Protection Area, the rest in the Special Area where regulations are less strict. The national report gives details of the activities prohibited in these areas without permission from the Director General of the Environment Agency.

144. MAURITANIA: A decree has been issued establishing a satellite reserve, attached to the Banc d'Arguin National Park, for protection of the Monk Seal *Monachus monachus*.

145. NETHERLANDS: The national report at Regina indicated that it had been decided to establish national parks at De Groote Peel, Weerribben and Biesbosch. According to the national report to the present meeting, significant changes have not occurred in the legal status, degree of protection or ownership of any listed wetlands. Two Ramsar sites, De Groote Peel and Oosterschelde, however, are short-listed to be brought under the Nature Conservation Act.

146. POLAND: Regulations issued by the Ministry of Environment Protection and Natural Resources have strengthened conservation measures at two Polish Ramsar sites, Lake Karas and Lake Swidwie. The Swidwie Reserve was extended to include state-owned areas and now covers 892 hectares; the extension has not for the present been included in the Ramsar site which covers 383 hectares. At Lake Karas, the regulation bans any changes in hydrological regime that might endanger the ecological condition of the reserve.

147. SURINAME: The Coppename Ramsar site, together with two other coastal wetlands, have been listed under the Western Hemisphere Shorebird Reserve Network (WHSRN).

148. SWEDEN: No major changes have taken place in legal status or degree of protection. A little more than 60% of the total area designated by Sweden under the Ramsar Convention enjoys the status of National Park, Nature Reserve or Nature Management Area. At Lake Hornborga, the state now owns 25% of the total area.

149. USSR: Following the establishment in 1987 of Union and Republic "State Committees for Nature Conservation" (Goskompriroda), there have been changes in the administration of a number of state reserves situated in Ramsar sites. The Volga Delta, Kirov Bays, and Krasnovodsk Ramsar sites come under the authority of the USSR State Committee. Kandalaksha Bay comes under the authority of the RSFSR State Committee. Lakes Kurgaldzhin and Tengiz come under the Kazak SSR Goskompriroda. Lakes of the Lower Turgay and Irgiz come under the Kazak Ministry of Local Industry. Finally Lake Issyk-Kul comes under the authority of the Kirghiz SSR Goskompriroda.

150. UNITED KINGDOM: The national report presents considerable detail on measures taken to improve the legal status of UK Ramsar sites. These include:

- establishment of Nature Reserve Agreement: (to create conditions similar to National Nature Reserves with private owners): Islay (Eilean Na Muice Duibhe - two agreements covering 364 hectares); Lindisfarne (renewal); Loch Lomond (extension for 25 years of agreement covering 170 hectares);
- notification or re-notification as Sites of Special Scientific Interest - SSSI - under the 1981 Wildlife and Countryside Act (or in Northern Ireland as Areas of Special Scientific Interest - ASSI): Abberton Reservoir, Bridgwater Bay, Bure Marshes, (renotification including an extension is pending), Hickling Broad and Horsey Mere (extension), Lindisfarne (Ramsar boundary under review, with extension envisaged), Loch Lomond (extension), Lough Beg, Minsmere-Walberswick, Rockcliffe Marshes;
- establishment of Management Agreements (for management of privately owned SSSIs): Bridgwater Bay (covering 29.5 hectares), Chichester and Langstone Harbours (agreements covering 32 hectares to protect wader roosts and Brent goose pasture and 18 hectares for a no-shooting refuge); Dee Estuary (series of short term Agreements, pending completion of long-term agreement); Derwent Ings; Islay-Bridgend Flats (two agreements covering 26 hectares); Islay-Gruinart Flats (eight agreements covering 2,152 hectares); North Norfolk Coast; Pagham Harbour (covering 88 hectares to protect wader roost and Brent goose feeding sites); the Swale (two further agreements bringing total to 17 agreements covering 161 hectares and enabling retention of undrained grazing marsh);
- purchase of land covering sections of Ramsar sites: at Langstone Harbour (6 hectares), Cors Fochno and Dyfi (21.4 hectares), Derwent Ings (42 hectares, bringing total owned by Nature Conservancy Council to 167 hectares, 21% of the site); Lough Beg (two small areas acquired by Department of Environment (Northern Ireland) as part of a proposed National Nature Reserve); North Norfolk Coast (marshes at Blakeney); Pagham Harbour (18 hectares of shallow flood and grazing pasture); and
- inclusion in EEC 'Environmentally Sensitive Area': Hickling Broad and Horsey Mere; Minsmere-Walberswick (part).

151. URUGUAY: The national report indicates that there has been no change in legal status and degree of protection since Regina. At Regina, it was noted (Proceedings page 204) that more than 85% was privately owned and current legislation could not prevent change; furthermore the area in public ownership was not necessarily adequately protected.

#### **Changes in ecological character of listed wetlands: general**

152. It is clearly essential that, after a wetland has been designated for the List, its conservation status should be maintained. The Convention therefore stipulates that "Contracting Parties shall formulate and implement their planning so as to promote the conservation of the wetlands included in the List" (Article 3.1). It also set out, in Article 3.2, a reporting procedure: "Each Contracting Party shall arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the List has changed, or is likely to change as the result of technological developments, pollution or other human interference. Information on such changes shall be passed without delay to the organization or government responsible for the continuing bureau duties".

153. The concept of "preventing change in ecological character" is fundamental to the Ramsar Convention, and is sufficiently flexible to allow considerable latitude to Contracting Parties: a listed site does not necessarily have to be a strict nature reserve; human activities or exploitation may be acceptable or even essential to maintain the ecological character.

154. Strict observance of Article 3.2 would require Parties to inform the Ramsar Bureau "without delay" of even possible changes to the ecological character of listed wetlands. In fact, the reporting procedure in Article 3.2 has been rather little used. Before the Groningen meeting the UK government provided information about problems caused by run-off of agricultural chemicals and resultant eutrophication at the two Ramsar sites of Rostherne Mere and Bure Marshes (see Groningen Proceedings, page 161). Between the Groningen and Regina meetings, the Bureau received notifications pursuant to Article 3.2 from Austria, Federal Republic of Germany and Iran. The information from Austria related to plans to build a dam on the Danube which would have affected the Hainburg section of the Donau-March-Auen Ramsar site; this information was transmitted to the Contracting Parties by Bureau notification 85/2, dated 4 March 1985. The information from Iran concerned construction of a dam in Afghanistan which affected the Lake Hamoun Ramsar sites; this information was transmitted to the Contracting Parties by Bureau Notification 85/6 of 22 May 1985. The information from the Federal Republic of Germany concerned building of a mine ventilation shaft and approach roads to the Lower Rhine Ramsar site; with the agreement of the Federal German authorities; this information was submitted to the Contracting Parties at the Regina meeting (see Regina Proceedings, pages 204-206).

155. Since the Regina meeting, the situation with regard to reporting under Article 3.2 has remained essentially the same; rather few Contracting Parties have informed the Bureau of actual or potential changes in ecological character. The Belgian authorities informed the Bureau about the restriction of the boundaries of the Ramsar site at Galgenschuur and the designation in compensation of the Yzer meadows (see paragraph 108); this information

was relayed to the Contracting Parties by Notification 88/2 of 10 March 1988. The Danish and Netherlands authorities informed the Bureau of the very minor modifications in boundaries noted in paragraphs 110 and 113 above; these matters did not appear sufficiently important to warrant preparation of a formal notification to all Contracting Parties. No other notifications have been submitted to the Bureau under Article 3.2.

156. On the other hand the national reports submitted to the Conference of the Parties contain, for Montreux as for previous Meetings, extremely detailed reports on listed sites and on any changes in ecological character. As noted at Regina (Proceedings, page 206) this is another illustration of the value of national reports for circulation of detailed information on the conservation status of Ramsar sites. Indeed, Recommendation C.3.9 of the Regina meeting commended Contracting Parties for bringing information on listed sites that had been severely damaged or were under imminent threat of degradation to the attention of the Bureau and the Conference.

#### **Sites identified at Regina as likely to undergo major change in ecological character**

157. The same Regina Recommendation (C.3.9) called on Contracting Parties to take swift and effective action to prevent any further degradation of sites and to restore the value of damaged sites. The Recommendation refers to Regina document C.3.6 (the Review of national reports and of implementation of the Convention), which in its paragraph 107 included a summary of the Ramsar sites "where the likelihood of major ecological changes seems greatest". These 29 sites, identified principally on the basis of national reports to the Regina meeting, were in the following 14 Contracting Parties.

- Algeria: Lake Oubeira
- Austria: Lower Danube (Hainburg)
- Belgium: Scheldt mudflats (Galgenschoor)
- Denmark: Ringkøbing Fjord
- Fed.Rep. of Germany: East Frisian Wadden Sea (Dollart)
- Greece: all eleven Ramsar wetlands - Evros, Lake Mitrikou, Lake Visthonis and Porto Lagos Lagoon, Nestos Delta and Gumburnou Lagoon, Lake Kerkini, Axios-Aliakmon-Loudias Deltas, Lakes Mikra Prespa and Megalí Prespa, Gulf of Amvrakikos, Mesolonghi Lagoons, Kotichi Lagoon
- Iran: Lake Hamoun, Lake Neiriz and Kamjan Marshes (Kamjan section), Shur Gol, Yadegarlu and Dorgeh Sangi Lakes
- Jordan: Azraq
- Pakistan: Khashki Reservoir Khabbaki Lake Drigh Lake
- Senegal: Djoudj N'diaël

- Spain: Daimiel
- Tunisia: Ichkeul
- United Kingdom: Lough Neagh
- Uruguay: Bañados del Este

This compilation has been regarded in some circles as an informal 'list of threatened Ramsar sites'. An update of Ramsar sites which have undergone, are undergoing or are likely to undergo change in ecological character is given in paragraph 224 below.

### **The Ramsar Monitoring Procedure**

158. At its first meeting after Regina (in Costa Rica in January 1988), the Convention's Standing Committee discussed ways in which the Convention could react to reports of change in ecological character at listed wetlands - from whatever source such reports they might come - and ways in which the Convention could cooperate with individual Contracting Parties to prevent or remedy such change. As a result the Standing Committee approved the Ramsar 'Monitoring Procedure', the text of which is included as Annex 1 to Document C.4.9. The essence of the Monitoring Procedure is that, as soon as the Bureau receives a report of a potential or actual change in ecological character at a Ramsar site, it contacts the Contracting Party concerned to discover whether the report is well-founded. If there does appear to be a serious risk of change in ecological character, the Bureau consults and collaborates with the Contracting Party concerned, and offers advice and assistance if required. This advice and assistance may take the form of provision of documentation or of sending of an expert mission to the site concerned. The Bureau reports on its action to the Standing Committee, and ultimately to the next Conference of the Parties, particularly if it appears that an acceptable solution cannot be readily achieved.

159. Initial reaction to establishment of the Monitoring Procedure was enthusiastic on the part of both Contracting Parties and of non-governmental partner organizations. Extra funding was made available, both by Parties and NGOs, for application of the Procedure. In the first instance, the Bureau has given highest priority to operation of the procedure at the 29 sites mentioned in paragraph 157, but it has also been used at five other sites where possible or actual change of ecological character have been notified since Regina (see paragraph 175). A report on operation of the Procedure was submitted to the sixth meeting of the Standing Committee, held in October 1989. For the present meeting of the Conference of the Parties, an information document (INF. C.4.6) giving a summary of work so far carried out has been prepared. The following paragraphs review the operation of the Monitoring Procedure at the 29 sites listed in paragraph 157, and the current status of these sites as reflected in the national reports.

160. ALGERIA: Lake Oubeira was mentioned in Regina document C.3.6 because of the possible effect on the Ramsar site of the Mexenna Dam. As yet it has not been possible to arrange for a mission to visit Algeria, though Bureau staff have had discussions with Algerian experts, and the Algerian Ministry of Agriculture has welcomed the prospect of a visit after the Montreux conference. The Algerian national report to the present meeting mentions the following changes in ecological character at Lake Oubeira:

- introduction of carp fry in 1985-86
- degradation of bank vegetation
- use of lake water for irrigation of nearby agricultural land
- use of lake water for drinking water supplies of the nearby town of El Kala
- development of surrounding land for agriculture
- grazing
- reclamation for house-building

It would appear that Oubeira should still be regarded as liable to major change in ecological character.

161. AUSTRIA: Hainburg, part of the Danube-March-Auen Ramsar site downstream of Vienna, was included in Regina document C.3.6 because of plans to dam the Danube there. As noted in the Austrian report to Regina "a commission has been established to consider the setting-up of the Danube-March-Thaya national park", "federal funds have been made available for planning", and "a government commission is currently examining alternative solutions for the former plans to build a power station at Hainburg". The Bureau has remained in contact with the Austrian authorities since Regina, and understands that some progress has been made by these commissions; for the moment it has not seemed appropriate to organize a formal mission. The draft Austrian report for the Montreux meeting indicates that the Ramsar site is most strongly threatened at present by the plans to exploit the Danube between Vienna and Hainburg for energy and to build a Danube-Oder canal. Realisation of these projects would probably mean, according to the national report, that the Danube-March-Auen should be deleted from the Ramsar List. The report recommends:

- Strengthening of nature protection measures for the whole area
- Cancelling drainage measures in damp meadows
- Ending establishment of new arable land
- Cancelling and prohibition of gravel extraction through the appropriate federal ministry
- Clarification of the future status of the site with respect to energy creation on the Danube and the Danube-Oder canal

Clearly, this site should continue to be regarded as liable to major change in ecological character.

162. BELGIUM: The Galgenschoor section of the Scheldt estuary was mentioned in Regina document C.3.6 because of the proposal to delete 30 hectares for construction of a container for Antwerp harbour. The Belgian government subsequently restricted the boundaries by 30 hectares, and listed 2,000 hectares in the Yzer meadow in compensation (see paragraph 108 above). A mission organized under the Monitoring Procedure in 1988 recommended that studies on the decrease of invertebrates in the remaining part of the Galgenschoor be carried out, that other nearby areas be designated for Ramsar (Saeftinghe in Netherlands, Kuifeend and Blokkersdyk in Belgium) and that management of the Yzer meadows be carefully studied. The Belgian national report to the Montreux conference indicates that heavy pollution of the Scheldt mudflats affects benthic organisms and therefore wader populations. The meeting may wish to discuss whether the site should still be regarded as liable to undergo major change in ecological character.

163. DENMARK: Ringkøbing Fjord was mentioned in Regina document C.3.6 because of statements in the Danish report about problems of pollution from agricultural chemicals in coastal waters. The Bureau has been in close contact with the Danish authorities and has been informed of a major restoration project on the Skjern River which flows into Ringkøbing Fjord. This will be reviewed in a general paper on restoration projects in Workshop D. The national report to Regina repeats (under 'gradual ecological change') the comments presented at Regina: since regulation of the Skjern River in the 1960's, increased sedimentation in the southern part of the Fjord has taken place. Since 1979 a marked eutrophication of the Fjord resulting from the presence of nitrates and phosphates (fertilizers) has been registered, causing a severe reduction of the macrophyte vegetation and, as a consequence, a decline in the number of dabbling ducks, coots and swans. This site should probably continue to be regarded as likely to undergo change until the restoration project has been carried out.

164. FEDERAL REPUBLIC OF GERMANY: The Dollart section of the East Frisian Wadden Sea Ramsar site was mentioned in Regina document C.3.6, because the Federal Republic's national report to the Regina meeting stated that the harbour planned in the Dollart (immediately adjoining the border with the Netherlands) might prove a threat to the whole Dollart ecosystem. The Ramsar Bureau has maintained close contacts with the authorities in the Federal Republic but has not organized a mission to the Dollart under the Monitoring Procedure. The situation in the Dollart is not mentioned in the Federal Republic's national report to the Montreux meeting (though the situation at the Leybucht,



another part of the East Frisian Wadden Sea Ramsar site is mentioned -see paragraphs 196-197 below). However the Bureau has been informed (through presentations at the international conference on wetlands in Leiden, Netherlands) that, following consultations between the governments of the Netherlands and the Federal Republic, plans to build the Dollart harbour have been cancelled. It would therefore appear that Dollart (though not Leybucht) could be removed from the list of sites liable to undergo major change.

165. GREECE: All eleven of Greece's Ramsar sites were mentioned in Regina document C.3.6, mainly because, in the absence of clearly marked boundaries, the Greek authorities had great difficulty in ensuring that the ecological character of the listed wetlands was maintained. The Regina document specifically mentioned intensified aquaculture, continuing reclamation and very intensive hunting at Amvrakikos; drainage, reclamation and heavy hunting pressure at the Evros Delta; drainage operations at Lake Visthonis; drainage of the Axios-Aliakmon-Loudias delta; establishment of a ship breaking yard in the Nestos Delta; and extension of commercial salt pans at Messolonghi. After the Regina meeting, the Greek authorities submitted provisional maps and boundaries of the eleven Ramsar sites, but these have not been confirmed to the Bureau. The Bureau has worked very closely with the Greek authorities: two monitoring missions, concerned mainly with defining boundaries, have visited Greece (the Greek national report to the present meeting notes that "the suggestions and evaluation made by the Bureau consultant have been quite helpful and well demonstrated in the two relevant reports. The conclusions and recommendations of the Monitoring Procedure have contributed useful elements to the National Policy"); a special issue of the Ramsar Newsletter has been devoted to Greece; the Bureau has worked closely with the Commission of the European Community on management of Messolonghi. The Bureau has received reports of problems at several Greek Ramsar sites (including new fish-farms at Amvrakikos and Messolonghi; a major motor racing circuit at Axios), and has contacted the Greek authorities on these matters.

166. The Greek report to the present meeting notes that, despite efforts at central and prefectural level, there have been cases of ecological degradation. It gives details of changes, and of existing and possible threats at all eleven sites:

- Evros Delta: as reported in the revised Greek report to the Regina meeting, the Drana Lagoon was drained by farmers in June 1987. The lagoon was reflooded in 1988 and 1989, and the ecosystem is slowly recovering. Water pollution entering the river from Bulgaria has caused massive fish die-off, but a joint commission has been established with Bulgaria. Illegal hunting remains a problem, though interest by the Hunters' Association is growing.
- Lake Mitrikou: excessive seawater entered the lake in 1988, following a drop in freshwater inflow. Freshwater inflow was increased in 1989, but the ecosystem has not fully recovered.

- Lake Visthonis and Porto Lagos: fishing activities have been regulated, but pollution from sewage remains a problem.
- Nestos Delta and Gumburnou Lagoon: river inflow has decreased, because of water retention in Bulgaria and intensive agricultural use in Greece.
- Lakes Volvis and Langada: Pollution from sewage remains a problem.
- Lake Kerkini: Water levels and quality are being studied at this artificial lake. Plans to raise dikes for agricultural purposes could have a very serious impact, but are now being reconsidered.
- Axios-Aliakmon-Londias Deltas: destruction of heron colonies and riverine vegetation by illegal sand extraction; construction of a motor racing circuit; inflow of sewage from Thessaloniki.
- Lakes Mikra Prespa and Megali Prespa: Disturbance of pelican colonies. Plans for establishment of a hydro-electric dam refused by the Ministry of Environment.
- Gulf of Amvrakikos: establishment of intensive aquaculture units, without environmental impact assessment.
- Messolonghi Lagoons: illegal construction of summer houses, establishment of an intensive aquaculture unit.
- Kotichi Lagoon: eutrophication and siltation.

Despite measures taken by the Greek authorities to counter some of the above threats, it would seem appropriate to continue to regard all eleven Greek Ramsar sites as liable to undergo major ecological change, at least until their boundaries and approved activities within them are established.

167. IRAN: The Iranian site of "Lake Hamoun" (in fact the two adjoining Ramsar sites of Hamoun-e-Saberi and Hamoun-e-Puzak were mentioned in Regina document C.3.6 because the Iranian authorities reported that their water supplies could be reduced by construction of a dam across the border in Afghanistan. The Kamjan marshes were included since the Iranian report to Regina indicated that they were to be removed from the Neiriz and Kamjan site, because of successive drought and also urgent national interest. Yadegarlu (part of the Shur Gol, Yadegarlu and Dorgeh Sangi Ramsar site) was included since the Iranian report to Regina indicated it was to be excluded from the Ramsar site because of drought and war conditions. As noted in the Regina overview (Proceedings page 200), it would seem that drought in arid or semi-arid regions need not necessarily lead to deletion. The Ramsar Bureau has proposed to the Iranian authorities that a mission should visit Iran under the auspices of the Monitoring Procedure to discuss these matters. An Iranian report is to be submitted at Montreux. After discussion of the report, the meeting may wish to advise whether these sites should be regarded as still likely to undergo major change in ecological character.

168. JORDAN: The Jordanian report to Regina referred to serious problems caused by pumping of water from Azraq for domestic use in the capital, Amman. The Regina meeting approved a Recommendation on Azraq (C.3.8 - the only Regina Recommendation referring to a specific sites) which called for a proper assessment of the effect of a pumping, reduction of pumping by 50% until the impact assessment is completed, and establishment of a long-term water resources plan. A Jordanian report for the present meeting has not yet been submitted. However a Ramsar mission visited Jordan under the auspices of the Monitoring Procedure in March 1990. Its report notes that while the ecological character of Azraq has undoubtedly deteriorated since 1977, largely as a result of groundwater extraction, it still meets Ramsar criteria; it notes that the Jordanian government has established a concept of "safe yield" for water extraction and that, if implemented, this would ensure wise use of Azraq water supplies. Azraq should probably be considered as likely to undergo major ecological change, until these measures have been implemented.

169. PAKISTAN: The Pakistan report to Regina referred to irreversible adverse changes in the ecological character of Kheshki Reservoir (pollution by industrial waste), Khabbaki Lake (introduction of herbivorous carp) and Drigh Lake (drainage). These three sites were therefore included in Regina document C.3.6 as likely to undergo major ecological change. (There is also some doubt as to whether Kheshki meets Ramsar criteria - see paragraph 104). A Pakistan national report has not yet been submitted for the present meeting. However a Ramsar mission visited Pakistan under the auspices of the Monitoring Procedure in May 1990. The draft report recommends that Kheshki be deleted from the Ramsar List, since it never fulfilled any of the Ramsar criteria and, now that it has been abandoned for water storage purposes, can no longer even be described as a wetland. On Khabbaki, the draft report suggests that the introduction of carp may not have had serious effects, but recommends further studies of the long term effects of fish introductions, changes in salinity and aquatic macrophytes and the effects of the use of domestic soap. Finally at Drigh, the draft report notes that problems caused by diversion of flood water for agriculture, siltation and spread of emergent vegetation have now been overcome, to a considerable extent, by management measures carried out by the Sind Wildlife Management Board. It would seem that these three sites should no longer be considered as likely to undergo major ecological change.

170. SENEGAL: According to the Senegalese report to Regina, the Senegalese Ramsar site of Djoudj was likely to be affected by dams being built on the River Senegal, and the N'diaël Ramsar site had received little water in recent years, following major hydro-agricultural works. Both sites were therefore mentioned in Regina document C.3.6 as likely to undergo major ecological change. A Ramsar mission to Senegal was arranged under the Monitoring Procedure in December 1988. Its report indicated that, following repairs to water

control structures and completion of the nearby Diama Dam, supplies of water to Djoudj should no longer be a problem; furthermore the site had been removed from the World Heritage List of sites in danger and a comprehensive management plan was about to be implemented. The draft Senegalese national report to the present meeting confirms that the Diama dam will guarantee water for Djoudj even in years of low flood; dramatic situations like that of 1984 are difficult to imagine in future. However one section of the National Park (Tiguet, 3,100 hectares) instead of being occasionally flooded will be permanently under water. The current situation on the frontier has two effects in the field of conservation: nomads' cattle, which had a severe effect, do not occur, and hunting is controlled by park personnel. It would seem appropriate to consider Djoudj as no longer likely to undergo major ecological change, but to maintain N'diaël as a site likely to be affected, until the restoration plans have been carried out.

171. SPAIN: The Spanish national reports to both Groningen and Regina referred to problems at the Tablas de Daimiel Ramsar site, where continued heavy exploitation of the aquifer for agriculture, together with a decrease in river inflow, had led to extreme dessication of the national park. Daimiel was therefore listed in Regina document C.3.6 as a site likely to undergo major change in ecological character, and a Ramsar mission visited the area under the Monitoring Procedure in March 1988. The report noted the effect of the Daimiel Water Restoration plan, which - at a cost of over 200 million pesetas - transfers water to Daimiel from another catchment and provides at least a short term solution. It suggests that the long term solution will depend on controlling extraction of groundwater, and calls for detailed monitoring of the results. A Spanish report has not yet been received. The Daimiel Restoration Plan will be covered, together with other major wetland restoration projects in a presentation at the Montreux workshop on Listed Sites. It seems that Daimiel should, until the results of controlling underground water extraction are clear, continue to be regarded as a site where ecological character may change.

172. TUNISIA: The Tunisian national reports to both Groningen and Regina indicated that Lake Ichkeul was likely to change in ecological character following construction of dams on inflow rivers. The site was therefore included in Regina document C.3.6 as one of those likely to suffer ecological change. Missions to Tunisia, under the Ramsar Monitoring Procedure, were carried out in April 1988 and December 1989. The reports recommended completion of a sluice on the outflow river, training of technical and educational staff and infilling of drainage channels. The December 1989 report included several suggestions, for consideration by an international seminar on Ichkeul held in February 1990, on future management and administrative structures at Ichkeul. The Tunisian national report to the present meeting (submitted before the February 1990 seminar) notes that the dams are still likely to affect the ecological character, but that the sluice on the outflow rivers is being

constructed with Tunisian government finance. The Ramsar Bureau was represented at the international seminar in February 1990, which indicated that the Tunisian government would take greater account of environmental issues at Ichkeul in future. The Tunisian delegation will be making a presentation on Ichkeul at Workshop D. It seems likely that for the moment, Ichkeul should still be considered as a site where ecological change may occur.

173. UNITED KINGDOM: It was noted at Regina that, among a variety of possible changes, the Lough Neagh Ramsar site in Northern Ireland might be affected by a proposal to develop lignite mining. The area was therefore mentioned in Regina document C.3.6. A Ramsar mission to Northern Ireland was carried out under the Monitoring Procedure. Its report indicated that for the moment extraction of lignite (for use in local power stations) is most unlikely to go ahead; it noted that effective action was taken to deal with a pollution incident (spillage of wood preservative). It also made recommendations on future boundaries of the Ramsar site, which may be affected by changes in boundaries of the Area of Special Scientific Interest, and on a "users' committee" to promote wise use of the site. The UK national report to Montreux confirms that the threat of lignite mining has receded well into the future and that the spillage of wood preservative did not produce any discernable effects on flora and fauna. It gives details of other studies and management measures being carried out. It appears that Lough Neagh and Lough Beg could be omitted from the sites likely to undergo major change.

174. URUGUAY: The national report at Regina indicated that large-scale changes had occurred at the very large Bañados del Este Ramsar site and that more could occur as a result of agricultural and infrastructural work. The site was therefore mentioned in Regina document C.3.6 as likely to undergo major ecological change. A Ramsar mission, under the aegis of the Monitoring Procedure, visited Uruguay in October 1988 [and] recommended follow-up visits to advise on further protection measures, studies and hydrological work. Since some of the agricultural and infrastructural work is being funded by the inter American Development Bank, any future missions under the Ramsar Monitoring Procedure will be closely coordinated with this Bank. The Ramsar Bureau has contacted the Uruguayan authorities about these follow-up missions; the authorities have suggested delaying the missions until changes in organization of conservation departments are completed. The Uruguayan report to the present meeting indicates that an environmental impact assessment has been made of possible changes, but that some wetland loss is still occurring. It would appear appropriate to maintain Bañados del Este as a Ramsar site where ecological change could occur.

175. As indicated in paragraph 158 above, the Ramsar Monitoring Procedure has been applied at several sites where possible changes in ecological character have been reported to the Ramsar Bureau since Regina. The following sites, in the territory of five Contracting Parties, are involved:

- India: Keoladeo National Park
- Mexico: Ria Lagartos
- Norway: Akersvika
- Poland: Siedem Wysp (Seven Islands) Reserve
- Sweden: Lake Hornborga

176. INDIA: Visits under the Monitoring Procedure were made to Keoladeo National Park in November 1988 and for a Bharatpur seminar in February 1990. The Ramsar site is affected by water shortage (poor monsoon in 1989 and inadequate and delayed release of water supplying the wetland) and an unbalanced grazing régime (feral cattle compete with wild ungulates, but do not control invasion of coarse vegetation in wet areas). It would seem that these problems could be overcome by dynamic management. The Indian national report to the Montreux meeting indicates that these issues were discussed at the Bharatpur seminar and that action is being taken on the findings of a study carried out by the Bombay Natural History Society with funding from the US Fish and Wildlife Service. It appears appropriate to regard Keoladeo as a site which has suffered or is likely to suffer major ecological change, until the management measures are completed.

177. MEXICO: The Bureau received reports of possible changes to ecological character at Mexico's single Ramsar site of Ria Lagartos, caused by the passage of Hurricane Gilbert in October 1988 and by extension of the commercial salt extraction industry. A mission was carried out under the Monitoring Procedure in June 1989. The report suggested that stronger protection measures were required in some areas, that some restoration work was required as a result of Hurricane Gilbert, and that the management plan for the whole area, currently under preparation, should be financed and executed in full; this would include cooperation with the salt company. The Mexican report to the Montreux meeting (received in July 1989) indicates that an extension of the salt production area has destroyed 42 hectares of the site, but that further expansions have been prevented. It would seem appropriate to consider Ria Lagartos as a Ramsar site likely to undergo ecological change, until the management measures have been completed.

178. NORWAY: The Bureau received reports in summer 1989 of possible negative effects at the Ramsar site of Akersvika, relating to harbour and commercial developments round the edge of the site, infilling, and to the lack of an overall management plan. A mission in

the context of the Monitoring Procedure was arranged in August 1989. The report suggests that most of the problems have been resolved, though better communication should be instituted between private nature conservation bodies and regional and national conservation administrations. The Norwegian national report to the Montreux meeting notes that the regional conservation authorities are fully aware of the site's Ramsar status and will as far as possible avoid direct or indirect negative impact on the reserve. It does not seem necessary to regard the Akersvika as a site likely to undergo major ecological change.

179. POLAND: The Polish report to Regina indicated that, at the Siedem Wysp Ramsar site, a slow disappearance of water plants had been noted; the matter was under investigation, and it might be necessary to raise water level in Lake Oswin. A Ramsar mission was organized under the Monitoring Procedure in July 1989. The report indicated that the basic cause of the changes in Lake Oswin was probably drainage work carried out on the lower reaches of the River Oswinka, across the border in USSR. The report supported the proposal by the Polish authorities to build a control structure to retain water, if possible with financial support from outside Poland. The Polish national report to Montreux indicates that these proposals are still under consideration, and that consultations have been carried out with the environment protection authorities of the USSR. It would seem appropriate to consider Siedem Wysp as a site likely to undergo change until the control structure has been built.

180. SWEDEN: In late 1987 a number of international conservation organizations, including the Ramsar Bureau, received representations from Swedish scientists suggesting that the Swedish governmental conservation body was destroying Lake Hornborga; these scientists suggested that the restoration plans at the Lake had been revised to such an extent that they destroyed the Lake. The Ramsar Monitoring Procedure was therefore operated during a visit to the area in August 1988. The report pointed out that the current restoration project are very close to the original conception and should go ahead; furthermore, in view of their exemplary importance, they should be carefully monitored and publicized. The presentation on Restoration Projects at the Montreux 'Listed Sites' workshop will cover Hornborga. The Swedish national report to Montreux refers to the Monitoring Procedure's report and indicates that the restoration plan is going ahead, and that the procedure to obtain the necessary permits to raise the water level has begun. It appears that any change in ecological character is, as far as possible, being restored. Therefore the site should not be included among sites likely to suffer major ecological change.

### **Future operation of the Monitoring Procedure**

181. Since the Standing Committee established the Monitoring Procedure in early 1988, it has received much support - both financial and moral - from Contracting Parties and from non-governmental organizations. It has proved to be an effective tool which enables the Bureau to respond rapidly to reports of actual or potential change in ecological character at Ramsar sites, yet to do so in such a way that the closest possible contact with the Contracting Party (or Parties) concerned is maintained. In most cases, a Bureau staff member has taken part in the first mission; where follow-up missions are necessary, consultants with appropriate expertise may be employed. This system ensures that missions are carried out in the spirit of the Convention. Contracting Parties appear to value the formal written report and recommendations prepared by such missions. Such reports are submitted in the first instance to the Contracting Party concerned; after the Contracting Party has had an opportunity to comment, the reports may be distributed more widely. They could in some cases lead to funding to carry out recommendations contained in the report.

182. Contracting Parties at Montreux may wish to endorse the decision taken by their Standing Committee on establishment of the Monitoring Procedure, to comment on its operation, and to offer suggestions on how it may be used in future.

### **Changes in ecological character of listed wetlands: information on additional sites**

183. As noted in paragraph 154 above national reports to the Conference of the Parties have, at Cagliari, Groningen, Regina -and now again at Montreux - been the principal source of information on changes, past, present or potential in ecological character at listed sites. In some cases major problems are mentioned, in others Contracting Parties are scrupulous to present full information even when the changes are minimal. The following paragraphs summarize information on this topic in the national reports submitted for Montreux; also included is some information sent direct to the Bureau by Contracting Parties, or - in a very few cases - by other organizations.

184. National reports from the following Contracting Parties indicate no change in ecological character: Canada, Chile, Finland, Ireland, Japan, Malta, New Zealand, Suriname, USA and Venezuela.

185. ALGERIA: The national report's comments on Oubeira are reviewed above in paragraph 160. The report notes changes in ecological character at Algeria's other Ramsar site, Lac Tonga, under the headings of poaching, eel fisheries and use of lake water to irrigate neighbouring agricultural land.



186. AUSTRALIA: The national report notes that at the Lake Crescent Ramsar site in Tasmania, the water level is to be increased by 0.6 metres to store water for irrigation; an environmental impact statement has predicted minor changes in ecological succession, but no effect on the site's important values. At Coral Bay in the Cobourg Peninsula Ramsar site, a 64 person tourist resort is being built, after an environmental assessment had been carried out. Monitoring of the effect will continue.

187. AUSTRIA: The draft report's comments on Danube-March-Auen are reviewed above in paragraph 161. At the Rheindelta Ramsar site on Lake Constance, tourism, recreation activities, hunting and fishing are all reported to be in contradiction with the aims of the Ramsar Convention; the report recommends: prohibition of waterfowl hunting, restriction of tourism and recreation activities to specific areas, establishment of a management plan and improvement of wardening. The Lower Inn Reservoirs (on the border with the Federal Republic of Germany which has also declared a Ramsar site on the Lower Inn) have maintained their importance, though there are conflicts with hunting and fisheries; the report recommends: coordination of protection measures between Austria and the Federal Republic of Germany, restrictions on sport fishing and boating, prohibition of hunting and guarantees for wardening and scientific research. Finally at the Lake Neusiedl Ramsar site, a bilateral national park with Hungary is being prepared (a presentation on this subject will be made in Workshop F of the Montreux meeting). The Austrian report mentions waterfowl hunting, tourism, reed management, water level regulation and eutrophication as major problems at Neusiedl. It recommends: prohibition of hunting in the most important bird areas; establishment of zones where tourists may not enter; restriction of water regulation; drastic reduction of nutrient inflow and establishment of a fishery management plan with special concern for species diversity.

188. BELGIUM: The situation at Galgenschloor on the Lower Scheldt is reviewed in paragraph 162. The national report presents information on ecological changes at Belgium's other five Ramsar sites. At Zwin, the Ministry of Public Works has financed works to reopen water connections with the sea, and thereby restore tidal conditions, at a cost of 30 million Belgian francs; the report expresses concern about increasing tourist pressure on the nearby Netherlands border. At Blankaart, sedimentation caused by agricultural practices in surrounding areas remains a major problem; in the Yzer meadows, recently added to this site, pumping of groundwater remains excessive; the report notes that, in negotiations with the farming community, the force of Ramsar status must demonstrate its importance. Because of this exemplary character it seems appropriate to consider the Blankaart and Yzer meadows as a site likely to undergo major ecological change. At the offshore Vlaamse Banken, populations of Common Scoter *Melanitta nigra* have moved inexplicably, and it may be necessary to revise boundaries accordingly.

The report notes that at Kalmthout Heath, numbers of migrant Whimbrel *Numenius phaeopus* in spring have decreased considerably, for reasons unknown; nevertheless the site is still of international importance on the basis of other criteria. Finally at the Harchies site, despite improved protection measures, there are problems of decrease in groundwater level caused by pumping across the border in France.

189. BULGARIA: The national report notes that the Srebarna site has been affected by eutrophication and the pelican colony disturbed by wild boars. Remedial measures are being taken. At Durankulak, low water levels and eutrophication have decimated the crayfish population; a restoration plan is in preparation. At Lake Atanasovsko an old petrochemical settling pond in the buffer zone has been restored to natural conditions.

190. DENMARK: The Danish national report notes that the National Forest and Nature Agency, in cooperation with the Wildlife Administration, has initiated a national monitoring programme covering Ramsar and EC Bird Directive sites for waterfowl and seals. The report presents details of potential threats at individual Ramsar sites. The situation at Ringkøbing Fjord is mentioned in paragraph 163 above; there eutrophication of shallow coastal waters, mainly through run-off of agricultural chemicals but also from domestic and urban waste water, is identified as a major problem. The Danish report notes that eutrophication of this kind is a major problem at many Danish Ramsar sites - Ful Sø; Vejlerne and Logstor Bredning; Ulvedybet and Nibe Bredning; Randers and Mariager Fjords; Lillebaelt; South Funen Archipelago; Skaelsør Fjord and Glaerno; Karrebaek, Dybso and Avno Fjords; Fejo and Femø; Praesto Fjord; Nakskov and Inner Fjords and Maribo Lakes. The problem seems so serious and so generalized (not only in Denmark, but in many other European Contracting Parties) that the Conference may wish to give the matter special attention. Since this type of pollution generally originates in the catchment area outside the strict boundaries of the Ramsar sites, some kind of general legislation or measure under the heading of wise use is perhaps required.

191. Other 'potential threats' noted in the Danish report are:

- heavy exploitation of the sea-bed for raw materials: Randers and Mariager Fjords; Anholt Island; Vejro and other islands in the Stavns Fjord site; Sejro Bugt; Skaelsør Fjord;
- excessive hunting pressure: Ful Sø; Lillebaelt; Fejo and Femø; Wadden Sea;
- disturbance (particularly on uninhabited islands): Nisum Fjord; Nisum Bredning; Hirsholmene; Nordre Rønne; South Funen Archipelago; Karrebaek, Dybso and Avno Fjords; Fejo and Femø; Maribo Lakes; Wadden Sea; and

- decrease in grazing animals, leading to encroachment of invasive vegetation in saltmarshes: Nissum Fjord; Vejierne and Logstor Bredning; Laeso; South Funen Archipelago; Praesto Fjord; Maribo Lakes; Waters between Lolland and Falster.

192. The Danish report notes that pollution from a chemical plant on the Ronland peninsula, adjoining the Nissum Bredning Ramsar site, remains a problem. The Environment Ministry has recently ordered the company to increase control over toxic pollution. In the Horsens Fjord and Endelave Ramsar site, plans for construction of a nuclear plant and of dams and bridges linking Jutland and Zealand have been abandoned. Furthermore plans for a new shortwave radio antenna just outside the Ramsar site at Gyllingnaes have also been abandoned. The plans for the antenna aroused wide discussion and protest in recent years. Finally the Danish national report mentions a variety of potential threats in the Danish section of the Wadden Sea: deposit of harbour sludge containing heavy metals; drainage and cultivation of grassland behind the seawall; overexploitation of shellfish; oil spills.

193. DENMARK (GREENLAND): In the section of the Danish national report devoted to Greenland it is emphasized that there are no imminent dangers threatening the welfare of Greenland Ramsar sites; however, as most of them are situated in coastal and tidal areas, any marine oil-spills or other sea-borne hydrocarbon pollution in adjacent waters are potential hazards to the fragile ecological integrity and balance of the wetlands. The only exploratory or industrial activity going on in Greenland Ramsar sites is at Jameson Land in the Heden Ramsar site (east coast municipality of Ittoqqortoormiit); in this area an international oil exploitation programme has been active since 1985 under strict environmental stipulations which regulate human activities between early May and late August, so that breeding and moulting birds are undisturbed.

194. EGYPT: The national report echoes the statements made about the Lake Burullus Ramsar site at the time of designation: the surface of the lake has decreased from 588 square kilometres in 1913 to 574 in 1956 and 462 in 1974 (the latter figure is given as the area of the Ramsar site). The decrease is due to continuous land reclamation along the southern shore. The national report notes that Ramsar sites are considered a protected area after designation and managed by the Egyptian Environment Affairs Agency; however, some other organizations such as fishing and governorate authorities have influence on the management. The national report does not mention any potential problems at Egypt's second Ramsar site, Lake Bardawil, but the Bureau understands that only a small sector of this large site is managed for conservation purposes. The national report notes that despite positive development in the field of wetland protection in Egypt, it cannot be denied that some wetlands are under pressure and threats from human and

industrial activities. Legislation is not the main weapon to counteract this pressure, but financial support, contributions and management projects in wetlands aid much, specially with respect to developing countries. The Egyptian report calls for assistance from international organizations to establish an integrated wetland management plan. It appears clear that Lake Burullus - and perhaps Lake Baradawil too - should be regarded as a Ramsar site likely to undergo major change.

195. GERMAN DEMOCRATIC REPUBLIC: The national report indicates that there have been no changes in ecological character at three Ramsar sites - Baltic Sea coast, Peitz Fishponds and Berga-Kelbra Storage Lake. At other sites problems have arisen (as in Denmark) above all through eutrophication caused by agricultural fertilizers and run-off (Krakower Obersee, Galenbecker See, Gülper See) and through conversion of grassland to arable land (Müritz See, Lower Oder Valley near Schwedt). Disturbance by tourists and water sport is also a problem at Müritz and the Lower Oder Valley).

196. FEDERAL REPUBLIC OF GERMANY: The situation in the Dollart section of the East Frisian Wadden Sea is reviewed above in paragraph 164. The national report reviews changes in ecological character at other Ramsar sites in the Federal Republic, including other sections of the East Frisian Wadden Sea Ramsar site and in particular the Leybucht. At Cagliari and Groningen, the delegation of the Federal Republic had indicated that reclamation of tidal mudflats and saltmarsh behind the dyke at Leybucht was unlikely, but still under consideration (see Regina Proceedings page 208). The delegation informed the plenary session of the Regina meeting (Proceedings page 48) that "plans for the construction of a dyke had been withdrawn and the new proposals concerning the area inland of the Ramsar site would have an unknown, but possibly even a positive impact on the Leybucht area". During 1989 the Ramsar Bureau received a legal opinion commissioned by WWF Germany; the report noted that in September 1985, the regional authorities ("Bezirksregierung Weser-Ems") had approved new dyke-building at the Leybucht, the establishment of a storage lake and building of a channel through Greetsiel to the new Ley sluice. The German legal expert expressed the view that "the Federal Republic, by its decision to approve the plans for restricted boundaries to the wetland caused by the new dike line, has violated the Ramsar Convention". (The expert also indicated that the works violated the EC Birds Directive).

197. The Ramsar Bureau brought this information to the attention of the Federal German authorities. The Federal German authorities commented that "designation under the EC Directive does not, in the opinion of the Federal Government, constitute a protection direction under national law. Protection is given by the Lower Saxony Wadden Sea ordinance of 13 December 1989; the protection zone however does not extend to the

whole bay, but rather stops at the eventual foot of the dykes in construction at the moment. Dyke construction was required because of severe flood tides in 1953, 1962 and 1976. While consideration was originally given to dyking in the entire Leybucht, the present plans provide for the dyke to be set back considerably from its present position. Once the construction of the new dyke is completed, disturbances will be a thing of the past. In future the undisturbed process of aggradation in the Leybucht will lead to the extension of new marshes. The Federal Government expects that the ecological calm which has descended on the area will lead to a situation where species which have disappeared from the Leybucht, such as seals, will return". The national report to the present meeting notes simply that "in order to ensure the drainage of a rather large agricultural area lying outside the wetland, and to guarantee shipping in the harbour of Greetsiel, the dykes are being moved in the Leybucht area. In all about 740 hectares of the wetland are affected by this. The planning decision ensures that in the medium term, no degradation of the area concerned will arise". The report does not indicate whether the 740 hectares will be deleted from the Ramsar site, whether special management measures will be instituted in the newly-enclosed areas (as for example at Hojer Foreland in the Danish Wadden Sea, where the dyke line was also changed) or whether other areas may be listed in compensation. For these reasons it seems appropriate to consider the East Frisian Wadden Sea (Leybucht) as an area where ecological change is likely to occur.

198. The report of the Federal Republic for the Montreux meeting presents, as at Regina, comments on changes in ecological character at other Ramsar sites (including those in Lower Saxony, which were not mentioned in the Regina report):

- Lower Rhine (North Rhine/Westphalia): the mining ventilation shaft mentioned at Regina has now been built. As a compensation measure, stricter protection measures are being taken in other sectors of this large sites, and an overall "optimal conception" prepared.
- Rieselfelder, Münster (North Rhine/Westphalia): The national report confirms the statement in the Regina report to the effect that the neighbouring industrial zone has been abandoned. Stronger protection measures are necessary to canalize visitor pressure.
- Weserstaustufe Schlüsselburg (North Rhine/Westphalia): The conversion of grassland into arable, foreshadowed in the Regina report, was prevented by establishment of new nature reserves and cooperation with farmers. The high tension line has been built, but no negative consequences have been recorded. Problems of disturbance by sailing boats and military aircraft continue.
- Bodensee (Baden-Württemberg): the national report refers to problems caused by waterfowl hunting on the Swiss side of the Wollmattinger Ried, and offers to seek cross-frontier agreements.

- Danube water-meadows (Bavaria): Hydrological and hydrobiological studies have been carried out, and will form a basis for future management plans.
- Ismaning Reservoir (Bavaria): Botulism continues to be a problem, though measures for dealing with future outbreaks have been prepared.
- Ammersee (Bavaria): Heavy tourist pressure remains a problem.
- Starnberger See (Bavaria): Although the lake is a landscape protection area, visitor pressure is great and there is public opposition to prohibition of access.
- Chiemsee (Bavaria): some progress has been made in establishing new nature reserves, and restricting waterfowl hunting.
- Lower Inn Reservoirs (Bavaria): Waterfowl hunting has been prohibited in this site which borders the Austrian Ramsar area (see paragraph 187). some restriction of fishing is still necessary.
- Rhine between Eltville and Bingen (Hesse section): Further restriction of hunting should be achieved, but the problems noted at Regina relating to windsurfing and disturbance by military aircraft persist.
- Rhine between Eltville and Bingen (Rheinland/Pfalz section): Stricter provisions at existing nature reserves.
- Diepholzer Moorniederung (Lower Saxony): Intensification of grassland usage by local owners is being combatted by establishment of new nature reserves. Peat exploitation continues in the central area of the Rehdener Geestmoor nature reserve.
- Steinhuder Meer (Lower Saxony): Restoration of areas where peat has been extracted, preventing grassland being turned into arable.

Apart from the Leybucht, potential changes at the Ramsar sites in the Federal Republic do not seem to be on a major scale.

199. GREECE: Comments in the national report on changes in ecological character have been covered in paragraphs 165-166 above.

200. HUNGARY: The national report refers to changes in ecological character at the following sites:

- Szaporca: eutrophication, partly natural, partly caused by lowering of groundwater, partly by hydroelectric power plants further upstream on the River Drave in Yugoslavia. Further research is urgently needed.
- Lake Velence: Restricted water inflow is accelerating plant succession in the reserve area. New protected areas and management plans are being established.

- Kiskunság National Park: Lowering of groundwater for agricultural purposes is a problem, which can be solved by improving the water balance of the region and restricting agricultural activities.
- Pusztaszer: the former heron colonies have been crowded out by cormorants. Wardens disturb cormorants early in the season to encourage herons.
- Saser: sedimentation of the ox-bow is a problem, as is greater frequency of cormorants.

201. ICELAND: The national report indicates that dredging at Lake Myvatn for diatomite began in 1967 and has now affected 6.7% of the lake bottom. Although an environmental impact study is under way, and a decision is to be taken in 1991 on the future of dredging, the potential impact seems serious enough for this extremely important site to be considered under risk of major ecological change. At Iceland's second Ramsar site, Thjorsarver, the report states that plans exist to dam the River Thjorsa to create a reservoir. This would submerge 16 sq km of vegetated land. Although studies are under way, and a decision has not yet been taken, the possible impact is so great that the site should also be considered as under risk of major ecological change.

202. INDIA: The status of Keoladeo is covered in paragraph 176 above. The Indian national report notes that Chilka Lake suffers from: shrinkage, siltation and sedimentation; choking of the mouth, decrease in bird migration and fishery potential, weed infestation and pollution. Although the Union government has set aside considerable sums of money for conservation and preparation of a management plan, the array of problems is sufficiently broad to consider Chilka as a site where ecological character is likely to change. The Indian national report also gives details of change in ecological character at the four new Ramsar sites of Wular, Loktak Lake, Sambhar Lake and Marike [vere Harike] Lake. They appear to suffer to some extent from infestation with water hyacinth. The problems seem particularly severe at Loktak (siltation caused by deforestation in the catchment area, infestation with water hyacinth and pollution), which should be considered as liable to suffer major ecological change.

203. ITALY: Although a national report has not been received, the Bureau has received reports from the Italian authorities about problems of eutrophication and pollution at two Ramsar sites near Cagliari, Sardinia - Stagno di Molentargius and Stagno di Santa Cilla. The Italian government has set aside large sums in its budget law (which specifically mentions the Ramsar Convention) for restoration of these sites. The Italian authorities have requested advice from the Ramsar Bureau on these sites, so it appears appropriate to regard them as sites affected by major ecological change.

204. MAURITANIA: The national report notes that changes in ecological character could come about at the Banc d'Arguin National Park through use of motorized fishing canoes. This is the more disturbing as Bureau staff were informed, during a visit to Mauritania in December 1988, that the Mauritanian government had decided to exclude motorized canoes from the national park and to allow only traditional sailing boats.

205. MEXICO: Comments on changes in ecological character at Ria Lagartos are covered in paragraph 177 above.

206. MOROCCO: The national report notes that the Iranian petrol tanker "Kharg 5" suffered an accident off the Atlantic Coast in December 1989. The Moroccan authorities succeeded in preventing the oil spill from reaching the coast, so no disturbance or degradation of coastal wetlands has been recorded. At Sidi Boughaba, a pumping station has been installed upstream of the Ramsar site, but this has not affected the water level of the lake. Rainfall cycles have returned to normal in the last two years after a long dry period; both mountain and desert lakes should benefit.

207. NETHERLANDS: The national report to Regina stated that investigation of high PCB levels at the Biesbosch Ramsar site were under way; the report to the present meeting notes that these are continuing but gives no indication of their findings. The report also refers to a devastating drop in seal populations of the Wadden Sea (two-thirds died) and to a decision not to reclaim 900 hectares of tidal marsh and summer polders in the Wadden Sea. The national report also notes that research has been carried out into possible changes in the ecological character of De Groote Peel, resulting from drainage activities in the surrounding agricultural area. (The Ramsar Bureau has received several separate reports on this matter). The national report notes that there are, as yet, no equivocal conclusions to be drawn. Nevertheless the question seems to be sufficiently serious for De Groote Peel to be regarded as a Ramsar site where major change in ecological character could occur.

208. NORWAY: The national report notes, as at Regina, that there were no dramatic changes in ecological character at listed wetlands in Norway, though some minor change occurred. However activities outside sites, such as agricultural pollution causing eutrophication or acid rain, may be a problem. At Ora, efforts to prevent increase in water salinity have been unsuccessful, and a research project is planned for 1991. At Nordre Oyeren, problems arise from agricultural chemicals and perhaps from manmade manipulation of water level; an incident of pollution in 1989 from a factory producing building blocks is under investigation by the police. Agricultural pollution is also a problem



at Jaeren. The road built to the island of Tautra, mentioned in the Regina report, is still causing an increase in mammalian predators.

209. POLAND: The Polish report indicates that no new changes of ecological character were noted in addition to those reported at Regina. (The situation at Siedem Wysp has already been mentioned in paragraph 179 above). The Ramsar Bureau has recently received reports that water inflow to the Slonsk reserve may be seriously reduced by construction of a water reservoir upstream, but this is not mentioned in the national report.

210. PORTUGAL: The national report says that the only change in ecological character noted has been the progressive abandonment of traditional salt production, particularly at the Ria Formosa Ramsar site, in favour of aquaculture.

211. SENEGAL: The Djoudj and N'diaël Ramsar sites are covered in paragraph 157 above. The national report notes that at Gueumbeul a system of sluices has been established in the last year with WWF finance and makes it possible to control water levels. In the Saloum Delta Ramsar site (also designated a MAB Biosphere Reserve), human pressure remains high, and the notion of [a] core area is under review. Proper management is hampered by financial constraints and lack of boats. A warden, Niang Gueye, was murdered in the reserve in March 1988.

212. SPAIN: Although a national report has not yet been received, the situation at Daimiel has been mentioned above in paragraph 171. The Spanish report to the Regina meeting indicated that there were problems of water supply at Doñana, which had motivated establishment of the Doñana Water Restoration Plan; the Bureau has received reports from various sources (notably during the Mediterranean seminar held at Doñana in November 1989) about problems in water supply to Doñana caused by factors outside the national park and Ramsar site; these relate to intensive use of groundwater for agriculture and for extension of the tourist complex. It may be that, as a result, Doñana should be considered as a Ramsar wetland likely to undergo a major change of character.

213. SOUTH AFRICA: The national report indicates that the ecological character of two of South Africa's listed wetlands is likely to change through human interference. An application for an open cast mining operation at the coastal dunes which form the interface between the St Lucia System and the Turtle Beaches and Coral Reefs of Tongaland, is under consideration by the Department of Mineral and Energy Affairs. The report states that, besides destruction of the biotic environment, there may be major impacts on groundwater hydrology, affecting a far greater area of wetlands. The impact of the

infrastructure may also be considerable. It would seem clear that these two Ramsar sites should be considered as likely to undergo major change in ecological character.

214. SWEDEN: The situation at Hornborga was covered in paragraph 180 above. The national report refers to impacts on other Swedish Ramsar sites: at Falsterbo-Foteviken, proposals to build a road covering 0.1% of the site have been approved (the Ramsar area has recently been extended by 380 hectares). At Lake Persöfjärden, more drastic measures are probably necessary to counteract a rapid increase in macrophyte vegetation. Close to Lake Gammelstadsviken, a planned urban expansion should include buffer zones. The report also refers to acid deposition, still regarded as a major threat to waterways and 20% of all lakes in Sweden. Liming takes place at very high cost to counteract the ecological effects. The ecological implications for Ramsar sites are not known.

215. SWITZERLAND: The national report notes that a project for 'ecological regeneration' of the section of the Fanel Ramsar site situated in the Canton of Bern has been successfully completed. A similar operation is awaited in the sector situated in the Canton of Neuchâtel.

216. TUNISIA: The situation at Ichkeul is mentioned in paragraph 172 above.

217. UGANDA: The national report comments that the Lake George Ramsar site is exposed to heavy metal pollution from the nearby Kilembe Copper Mines. The effects of this effluent have yet to be determined. The report notes that discussions on possible assistance and collaboration with Ramsar Bureau on this issue have already begun. It seems appropriate to consider Lake George as a Ramsar site where major ecological change could take place.

218. USSR: The national report refers to serious changes at several of the very large Ramsar sites in the USSR:

- At Kirov Bays (Azerbaijan SSR), supplies of water have been restricted by a dam on the River Vilyazbchai which supplies Maly Bay; plans for compensatory supplies are being developed jointly with fisheries organizations.
- The continued rise in the level of the Caspian appears to have had some positive effects at the Volga Delta and Kirov Bays Ramsar sites.
- At Lake Tenghiz (Kazakhstan SSR), water levels have risen sharply following increases in precipitation.
- At Lake Issyk-Kul (Kirghiz SSR), the fall in water level is likely to be exacerbated by building of a huge health resort.

It would appear that at least Kirov Bays and Lake Issyk-Kul should be regarded as sites where major changes of ecological character may take place.

219. In addition, the USSR report refers to a Resolution approved by the Supreme Soviet on 'Urgent measures for the ecological rescue of the country'. This classes major wetlands in different ecological categories: thus in the Aral Sea, the situation is "out of control"; the Dnepr and Dnestr areas, the basins of the Volga, Sevan, Issyk-Kul, Lake Balkhash and Lake Ladoga, the Black Sea, the Sea of Azov, the Caspian and the Baltic are all "on the brink of an ecological crisis"; while Lake Baikal and the basins of the Rivers Ob and Amur "require the acceleration of nature conservation measures". This would appear to confirm reports which have reached the Ramsar Bureau of major pollution problems at the Kerkinitski Ramsar site (Ukrainian SSR), which could also be included among Ramsar sites where major ecological change is likely to occur.

220. UNITED KINGDOM: The UK report provides details on changes, actual or potential, at 26 of its 44 Ramsar sites, and of the measures taken to remedy them:

- Alt Estuary: the effects of an oil spill in August 1989 do not appear to have been serious. A planned barrage across the nearby Mersey Estuary could affect sedimentation patterns.
- Bure Marshes: Phosphate stripping and sediment removal has reduced algal bloom and improved aquatic vegetation. (This problem was reported to the Bureau before Groningen under Article 3.2; see paragraph 154 above).
- Chichester and Langstone Harbours: recreational pressure remains a problem, but pollution from sewage effluent is to be reduced.
- Cors Fochni and Dyfi: The site has recovered satisfactorily from the fire reported at Regina. Water levels are to be raised.
- Dee Estuary: The site, which lies across the English-Welsh border, is affected, as already reported at Regina, by a variety of problems - reclamation for road-building and harbour extension, tipping of coal spoil, recreational pressure, changes in bird populations, and the possible effect of a barrage across the nearby Mersey Estuary. It would seem appropriate to regard the site as likely to undergo ecological change, if only as an experiment in developing an overall management plan for a rather large site (13,055 hectares) coming under the jurisdiction of several different administrations.
- Derwent Ings: Increase in breeding waterfowl following increased water control and revision of agricultural practices. Potential problem of coal mining.
- Gladhouse Reservoir: Increased eutrophication for reasons unknown.
- Hickling Broad and Horsey Mere: Improvement in growth of submerged water plants, but continuing recreational pressure.

- Holburn Lake and Mosses: drying out to be investigated.
- Irthinghead Mires: The drying out reported at Regina seems to have been caused by adjacent forestry planting. Remedial action is in progress.
- Islay-Bridgend Flats: Establishment of a clam farm, and road-building plans are potential problems. The road, if built, would cause a loss of 25% of marshland, so this site should perhaps be regarded as likely to undergo major ecological change.
- Islay-Gruinart Flats: Disturbance to waterfowl from a new oyster farm.
- Lindsfarne: Eutrophication, continuing control of cordgrass *Spartina* and building plans on the nearby mainland.
- Loch Eye: Studies are continuing into the eutrophication problems reported at Regina.
- Loch Leven: Neighbouring industrial concerns have been prosecuted following two pollution incidents. Phosphate inputs from housing estates continue to cause concern, as reported at Groningen and Regina.
- Lough Lomond: Remedial work to prevent the drying out of bog areas reported at Groningen and Regina has continued, with promising results.
- Lough Neagh and Lough Beg: see paragraph 173 above.
- Martin Mere: dredging has been carried out to prevent siltation and improve water control in ditches.
- Minsmere-Walberswick: applications have been made to extend a nuclear power station on land adjacent to the Ramsar site.
- North Norfolk Coast: increased visitor pressure is being studied.
- Ouse Washes: unseasonable flooding from April to June affects breeding waterfowl. Hydrological studies have been carried out but not published.
- Pagham Harbour: siltation from adjoining arable land.
- Rostherne Mere: pollution from sewage effluent (reported to the Bureau before Groningen under Article 3.2, see paragraph 154) is being overcome by a new sewage scheme and diversion of a second source of nutrients.
- The Swale: suction dredging for cockles may affect invertebrates and waterfowl populations. Marinas and housing developments on nearby land could affect the Ramsar site.
- The Wash: possible dumping of dredging material causes concern. The effect of a military firing range on wildlife is being studied.

221. URUGUAY: Ecological change at Bañados del Este is discussed under paragraph 174 above.

**Ramsar sites likely to undergo change in ecological character: a possible "List of Ramsar sites in danger"**

222. The preceding sections of this document have summarized comments in national reports about Ramsar sites which have undergone, are undergoing or may in future undergo change in ecological character: those already identified at Regina (paragraph 157) where in many cases the Monitoring Procedure has already been applied (paragraphs 157-174), those notified to the Bureau between the Regina and Montreux meetings (paragraphs 175-180), and those mentioned in reports to the present meeting (paragraphs 183-221). A résumé of the 46 sites concerned, which Contracting Parties will no doubt wish to revise and complete at Montreux, is given below in paragraph 224. If the number of sites seems large in proportion to the number of listed Ramsar sites, this is an indication of the difficulties of maintaining the ecological character of dynamic ecosystems like wetlands.

223. It is clear that the scope and size of the problems at these wetlands vary enormously, as do the wetlands themselves. In some cases very large wetlands suffer fundamental threats to their continued existence; in others, possible solutions have been found and are in some cases being applied. Some of the wetlands concerned are in industrialized countries which have extensive funds and well-trained staff at their disposal; others are in developing countries where finance and expertise are in short supply. It nevertheless appears to be a worthwhile exercise to draw up a list of sites where action is needed, partly as a guide to Contracting Parties themselves, partly as an indication for future operation of the Monitoring Procedure, partly as a signpost to opportunities for cooperation between Contracting Parties in funding and exchange of technology and expertise. The existing list has been drawn up by the Bureau on the basis of available information. Contracting Parties may however wish to take further the suggestion, made in the overview paper to workshop A, that a more structured formal procedure should be established: a "List of Ramsar sites in danger" could be set up, along the lines of the "List of World Heritage sites in danger".

Stricter criteria for admission to or removal from such a List could be developed and applied by the Parties, perhaps through a Scientific Committee. Sites included on the list would be obvious candidates for financial assistance.

224. The 46 Ramsar sites in 23 Contracting Parties which at present appear likely to have undergone, to be undergoing, or to undergo a change in ecological character are as follows:

- Algeria: Oubeira
- Austria: Danube-March-Auen (Hainburg)
- Belgium: Lower Scheldt (Galgenschoor), Blankkaart and Yzer meadows)
- Denmark: Ringkøbing Fjord
- Egypt: Lake Bardawil, Lake Burullus

- Fed. Rep. of Germany: East Frisian Wadden Sea (Leybucht)
- Greece: all eleven Ramsar sites
- Iceland: Myvatn, Thjorsarver
- India: Keoladeo National Park, Loktak Lake
- Iran: Hamoun-e-Saberi, Hamoun- e – Puzak, Yadegarlu, Kamjan Marshes
- Italy: Stagno di Santa Gula, Stagno di Molentargius
- Jordan: Azraq
- Mexico: Ria Lagartos
- Netherlands: De Groote Peel
- Poland: Siedem Wysp
- Senegal: N'diaël
- South Africa: St Lucia System, Tongaland Beaches and Coral Reefs
- Spain: Daimiel, Doñana
- Tunisia: Ichkeul
- Uganda: Lake George
- USSR: Kerkinitski Bay, Kirov Bays, Lake Issyk-Kul
- United Kingdom: Dee Estuary, Islay-Bridgend Flats
- Uruguay: Bañados del Este

### **Natural change in Ramsar sites**

225. Under Article 3.2 of the Convention, Contracting Parties provide information on changes in ecological character at Ramsar sites "as the result of technological developments, pollution or other human interference". The Convention does not however refer specifically to gradual changes which occur naturally in dynamic wetland ecosystems. Some Contracting Parties, either in their national reports or in contacts with the Bureau, have raised the question of what should be done about natural change in ecological character. Thus the Danish report includes for each of the 27 Ramsar sites in Denmark, a section on "gradual ecological change". Many national reports, in commenting on changes in ecological character at Ramsar sites mention natural causes e.g. at Lake Persöfjärden in Sweden (rise in land) or Ria Lagartos in Mexico (hurricane).

226. It would seem that where changes come about through natural causes such as vegetational succession, no special action is necessary. Where however such changes arise from long-term human interference (such as pollution by agricultural chemicals or urban and industrial water, or acid rain) remedial action will be required. Such action is likely to go beyond the scope of interventions at specific Ramsar sites: national legislation may be required, together with a means of enforcement, and will need to be part of national wetland policies established under the "wise use" obligation.

## **Management of Ramsar sites**

227. The Working Group on Criteria and Wise Use established at Regina included in its report an Annex entitled "Designation of wetlands for the List, and subsequent action". (This Annex is appended as Annex 2 to document C.4.9). The document emphasizes that listing, far from being a final step, is only a first step and that Contracting Parties should take full account of management requirements at listed sites. (One management option might be to recreate former conditions which had changed; another to maintain current conditions; a third to allow natural changes discussed above in paragraph 225 to take their course). Many Contracting Parties are of course already applying sophisticated management techniques to their Ramsar sites; in some cases these involve major restoration plans, and an overview of such major and costly undertakings will be presented in Workshop D, with special reference to: Lake Hornborga (Sweden), Skjern River (Denmark), Daimiel and Doñana (Spain), Molentargius (Italy). It is significant that many Contracting Parties are investing large sums to maintain (or to re-create) values lost from wetlands.

228. Contracting Parties were requested to provide in their national reports action taken at listed sites as regards management. The national reports, particularly those from Austria, Denmark, Federal Republic of Germany, Japan, Netherlands, New Zealand, United Kingdom, Uruguay and Venezuela present very detailed statements on particular sites.

229. The meeting may consider that all Ramsar sites should have an overall long-term management plan, and whether guidance could be given on how to compile, finance and carry out such plans.

## **Criteria for identifying wetlands of international importance**

230. The "Working Group on Criteria and Wise Use" established at Regina produced a set of revisions to the Criteria adopted at Regina. Their proposal, as amended after comments from Contracting Parties, has been circulated to Contracting Parties under cover of Notification 1990/1 of 16 January 1990, and is reproduced as Annex 3 to document C.4.9. The criteria have been proved extremely useful in identifying Ramsar sites, so approval of the proposed revision by the Montreux meeting will be most important.

231. Under the terms of the Convention, Contracting Parties designate wetlands for the List, using the criteria as a guide to identifying sites which qualify. There is no procedure, like that which exists under the World Heritage Convention, for checking that sites designated do in fact met the criteria. The meeting may wish to consider whether such an

admissions procedure might be established, as suggested in document C.4.6, to ensure that Ramsar sites are really of global stature.

### **Information on listed sites**

232. The Ramsar Bureau maintains the List, in close cooperation with work [evidently something missing from the original here]. The latest version of the List has been distributed as information document INF. C.4.3). This version has been considerably simplified, and reduced to a bare reference tool, since the more detailed "Directory of wetlands of international importance" is available in a revised version for Montreux.

233. With the increasing number of Ramsar sites it has been important to develop a uniform data sheet and classification. These are appended as Annex 4 to document C.4.9 and it is hoped Contracting Parties will support their adoption and use. It is intended to transfer existing information on Ramsar sites to this format after the Montreux Conference. In this way a standardized description of all Ramsar sites will be possible, and better analysis and exchange of relevant information can be arranged. Contracting Parties will be invited to check the revised data sheets relating to sites in their country after Montreux.

234. The resulting Ramsar database will be at the disposal of Contracting Parties which wish to seek advice on conservation or management of comparable sites elsewhere. It will also be used to produce future versions of the Directory, and to respond to the many enquiries received by the Bureau. Grants for its development have been made available by the UK. A demonstration of its capabilities will be made at Montreux.

### **Making the most of the Ramsar logo**

235. The Ramsar Bureau has prepared diplomas for each Ramsar site, and sent them to the Contracting Party concerned. They feature the Ramsar 'logo' (adopted by the Standing Committee) and are intended to be displayed in a prominent place at each Ramsar site.

236. It is suggested that the Ramsar logo and diploma be given wide publicity - like World Heritage or Biosphere diplomas. Some Contracting Parties have indicated that they intend to develop site plaques, in weather-resistant materials, to be erected at various points in or around designated sites.

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## **IV NATIONAL POLICY ON WETLANDS**



## **Wise Use - general**

237. Together with the obligation to designate a wetland of international importance for the Ramsar List, the second major obligation accepted by Contracting Parties to the Ramsar Convention is to make "wise use" of their wetlands. This obligation is expressed in Article 3.1 of the Convention which states that "Contracting Parties shall formulate and implement their planning, so as to promote the conservation of wetlands included in the List, and as far as possible the wise use of wetlands in their territory".

238. After considerable concentration on listed wetlands in the Convention's early years, the concept of wise use began to obtain greater importance, particularly as more developing countries became Contracting Parties. This was particularly striking at the Regina meeting, which succeeded in producing a simple document as an Annex to the Regina Recommendations which in three pages (Regina Proceedings pages 130-132) set out the criteria for identifying wetlands of international importance and a definition of wise use, together with guidelines on how to implement wise use.

239. The definition of wise use adopted at Regina was as follows:

"The wise use of wetlands is their sustainable utilization for the benefit of humankind in a way compatible with the maintenance of the natural properties of the ecosystem".

This definition has the considerable advantage of referring to the concept of sustainable development, widely used in recent times. The Regina definition further defined "sustainable utilization" and "natural properties of the ecosystem". Sustainable utilization is defined as "human use of a wetland so that it may yield the greatest continuous benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations". Natural properties of the ecosystem are defined as "those physical, biological or chemical components, such as soil, water, plants, animals and nutrients, and the interactions between them".

240. The Regina meeting established a Working Group on Criteria (Recommendation C.3.I) which was the task of examining "the ways in which the criteria and guidelines for identifying wetlands of international importance might be elaborated, and the wise use provisions of the Convention applied in order to improve the worldwide application of the Convention". The Working Group, after a series of meetings and postal contacts, produced a report and guidelines for the implementation of the wise use concept of the Convention. This report was submitted to the Contracting Parties for comment under Bureau Notification

1989/5 of 31 March 1989; Parties were invited once again to comment on the report by Notification 1989/8 of 27 June 1989. An amended version of the report, incorporating comments by Contracting Parties, was circulated with Notification 1990/1 of 16 January 1990. The text of the guidelines are included as Annex 1 to Document C.4.10. The guidelines are to be discussed in Workshop E of the Montreux meeting and will, it is hoped, be formally adopted in plenary session.

241. The 'Outline for national reports' submitted to the Contracting Parties was based on the report of the Working Group. The Working Group suggested that "the concept of wise use seeks the formulation and implementation of general wetland policies, and wise use of specific wetlands". Its report was divided into three categories: "establishment of national wetland policies"; "priority actions at national level"; and "priority actions at particular wetland sites". The outline, after requesting a general statement on the current national wetland situation, asked for comments under these headings.

#### **General statements on the current national wetland situation**

242. In general, the statements on the general situation reflect an increasing awareness of the value of wetlands, but considerable concern at continuing loss. Some of the comments are summarized in the following paragraphs.

243. BELGIUM: The national report refers to continuing loss of wet grasslands and to a drop in quality of surviving sites. The report suggests a decree be established, making it essential to obtain permission before changing utilization of ecologically important habitats.

244. BULGARIA: There were in the past vast wetlands along the banks of the Danube, but most were drained after a flood control dike was built. Eutrophication is also a problem and ways of freshening waters must be sought.

245. CANADA: The recognition of wetlands and their flora and fauna, ecologically and economically important for Canada, continues to increase. This increased awareness of the significance of wetlands is being translated into solid action in innovative, collaborative ways. Examples of Canada's philosophy of cooperative partnerships for conservation are given under several headings - the Great Lakes System, Wildlife Habitat Canada, the North American Waterfowl Management Plan, the Western Hemisphere Shorebird Reserve Network, and in the Saint Lawrence River System.

246. CHILE: The national report fears that the authorities do not appreciate the importance of Ramsar, and that further wetland areas will not be secured unless more economic

support is given to recruit staff to develop wetland policies within the national conservation organization.

247. GREECE: The wetland situation in Greece is at a turning point. Most remaining wetlands are located in the less developed part of the country and had not been submitted to excessive pressures up to recent years. This relative delay in economic development and the consequent expectations of local people and private investors for rapid economic growth create a big obstacle in promoting conservation of wetlands.

248. HUNGARY: Intensification of agricultural activity, drainage, human interference (development of infrastructure, flood protection, industrialization) have led to the decrease of wetland habitats. On the other hand, the presence of man-made wetlands (fish ponds, water reservoirs) cannot counterbalance the loss of natural wetlands, either quantitatively or qualitatively.

249. ICELAND: Coastal and estuarine habitats are at present little affected by development. Lowland mires and some lakes have been much reduced in some areas of agricultural drainage. Many highland tundra areas in central Iceland are being affected by hydro-electric development.

250. INDIA: India has a wealth of wetland ecosystems, ranging from the cold arid zone of Ladakh to the wet humid climate of Imphal, from the warm arid zones of Rajasthan to tropical monsoon Central India. Millions of people in India depend directly or indirectly on wetland resources for food (fishing, hunting, shrimp harvest, etc.). These wetlands harbour a vast array of birds, reptiles, fishes and other fauna, and also play an important role in flood control, recharging of aquifers, regulating water quality, abating pollution, and as sites for aquaculture. Unfortunately these wetlands have been subject to a lot of biotic pressures as in all developing countries. They have been drained and converted into agricultural and pasture lands. Annual grazing has reduced residual cover and has altered plant succession.

251. IRELAND: The Irish report states that no new arterial drainage schemes have commenced in the reporting period, and no reliable statistics are available for field drainage as this is included under the general heading of land reclamation. An inventory of remaining raised bogs showed that of an original area of 311,000 hectares only 23,000 hectares remain. An inventory of blanket bogs is now under way. The main problems in freshwater aquatic systems are pollution and eutrophication.

252. JAPAN: Most untouched Japanese marshland is in Hokkaido. Only 60% of Japan's 32,000 km coastline remains intact. Fifteen percent of Japanese land is used as farmland, half being paddy fields.

253. MOROCCO: There are more than 35 major wetlands in Morocco, some of them temporary in character. There are in addition 34 large reservoirs behind dams, and there are plans to double the surface area from 50,000 to 100,000 hectares by the end of the century.

254. NETHERLANDS: During the last decades, the Netherlands has increasingly recognised the ecological functions and values of wetlands, which has had an effect on its national and international policies on nature conservation. These policies are implemented by aiming to preserve the wetlands averting threats and reducing harmful effects of human interference is allowed.

255. NEW ZEALAND: Wetlands are recognised as an important character of the ecological diversity of New Zealand. Over the past 150 years, up to 90% of wetlands have been lost through land drainage and development. This trend is now reversing. A significant achievement was the removal in 1987 of Government subsidies for draining wetlands. A recent court case set a precedent by preventing drainage of Whangamarino wetland, in favour of retaining its ecological and wildlife values.

256. NORWAY: As in many other countries, wetlands have been drained, cultivated, used as recipients for pollution and lost as a result of industrial development, road building and hydro power development schemes. Many wetlands are still lost, but not as rapidly as a few years ago. Draining for development of new farmland has decreased, partly as a consequence of reduced grants for doing so. There seems to be a slightly increasing awareness of the value of wetlands e.g. for improvement of water quality.

257. SURINAME: The entire estuarine zone of Suriname is considered to be a very important wetland for local and migratory waterfowl. Like all mangrove ecosystems, it has a very high biological productivity. Aware of the importance of the area, the estuarine zone was proposed to be designated a multi-use management area.

258. SWEDEN: Present legislation concerning wetland protection is to some respect questioned. Wetland loss is still significant and therefore consideration should be given to changes in legislation. Among habitats adversely affected by drainage operations, wet forests should be mentioned.

259. SWITZERLAND: The general situation of Swiss wetlands is improving progressively - but slowly - as a result of the completion of sewage systems, the obligation to maintain a minimum flow in rivers exploited for hydro-electric power, establishment of a directive concerning river regulation which gives a larger role to conservation, and the obligation to carry out environmental impact assessments for hydro-electric projects.

260. USSR: The country's wetlands are subject to strong human pressure, both on the water body itself and, most often, because of effects on the water catchment area. Although the effect on water bodies has so far been small in a significant part of Siberia, Kazakhstan and the Far East where land usage in the water catchment area is traditional (cattle rearing, hunting), the situation has become catastrophic in a number of regions; in these (see paragraph 218 above) the supreme soviet has approved a Resolution on urgent measures for ecological rescue.

261. UNITED KINGDOM: Loss and damage to wetlands in the UK is still continuing, though statutory protection on many sites has limited the damage. The national report reviews in detail the specific problems of peatlands, estuaries, rivers and lakes and coastal sites, and also summarizes the situation as regards wetland pollution.

262. USA: The wetlands of the USA are vital areas that constitute a productive and invaluable public resource. Their ecological values are only now being better understood. The report notes that an estimated 38 million hectares (44% of the original 87 million) remain in the lower 48 states. Estimates of recent losses range from 121,500 to 185,400 hectares per annum. Lost hectareage does not however depict the full nature of the problem as few wetlands are in pristine condition.

263. As a general conclusion, it may be stated that awareness of wetland values, as instanced by comments in the previous paragraphs, has increased greatly, but has not prevented further loss. Furthermore only the United States appears to have a record of the extent and pace of wetland loss. The meeting may wish to address two of the questions posed in document DOC. C.4.6 - How are wetlands to be maintained in a pristine, if not natural state? How can past wetland losses be quantified?

### **Progress made towards 'Establishment of national wetland policies'**

264. The report of the Wise Use Working Group suggested that in the long term, all Contracting Parties should have comprehensive national wetland policies, formulated in whatever manner is appropriate to national institutions. Contracting Parties were invited, under section 3.2 of their national reports to indicate progress made towards such policies.

Their comments are summarized in the following paragraphs. In general, many Contracting Parties have covered most of the elements to be included in national policies, but few have as yet established policies and the mechanism to administer them.

265. AUSTRALIA: While the Federal Government recognises the importance of protecting wetland resources, State and Territory Government are primarily responsible for implementing the Convention. The recent escalation in wetland management initiatives in Victoria should provide a blue print and catalyst for similar programmes in other states; these include improvements to the condition of land in wetland catchments, new legislation, and public education measures. Work has begun in Western Australia for preparation of a State Wetland Conservation Policy.

266. BULGARIA: In its future work, the Ministry of the Environment will take into consideration the Guidelines for implementation of the 'wise use' concept.

267. CANADA: The Federal Government of Canada is in the process of developing a federal policy on wetlands. Now in its second draft, and is under consultation with provinces and territories and other Federal Departments, it calls for:

- maintenance of wetlands throughout Canada;
- enhancement where loss or degradation of wetlands have reached critical levels;
- recognition of wetland functions in resource planning, management and economic decision-making;
- protection of wetlands of national significance; and
- utilization in a manner that enhances prospects for sustained and productive use by future generations.

268. DENMARK: The Ramsar Convention has not been the subject of independent national planning directives but has been taken into account in the planning process. The Monitoring Programme aims at monitoring bird populations in all Ramsar sites, and the results show that Danish Ramsar sites fulfil their objective of preventing major habitat changes. The Action Plan for the Aquatic Environment aims to reduce discharge by 50% in 3-5 years from spring 1987. The problems must be solved not by treating each Ramsar site as a separate unit but in the framework of general pollution abatement.

269. FINLAND: The Finnish national wetland policy described at Regina remains unchanged as an integral part of Finland's conservation policy. The act on peatland preservation entered into force in 1988, and since 1986 the Nature Conservation Act, which

allows compensation for economic loss caused by establishment of a nature reserve for private land, has been applied.

270. GERMAN DEMOCRATIC REPUBLIC: The new ordinance on nature conservation came into force in September 1989 and gives legal protection to "wetlands of international importance".

271. GREECE: The goal set has been establishment of protected areas, including strict zones of protection integrated into buffer zones. A more detailed study of necessary management techniques and administrative structures will be made.

272. INDIA: A National Wetland Management Committee has been established, whose tasks are to lay down broad policy guidelines, to decide on priority wetlands for intensive compensation measures, to monitor implementation of programmes and to advise on preparation of an inventory. Sixteen wetlands have been identified for priority action, the inventory has been published and bilateral assistance has been sought for conservation and development of Chilka Lake, the Greater Nainital Lakes region and the upper and lower lakes of Bhopal.

273. IRELAND: The Government has used its Presidency of the European Commission to launch a new Environment Action Programme, which takes particular account of the concept of sustainable development, the principle of precautionary action (even when there is no scientific evidence to link discharges with detrimental environmental effects) and integration of environmental considerations in all policy areas.

274. JAPAN: There is no special law concerning wetland protection but many other laws relate to protection of the natural environment and water quality, while environmental impact assessment is required for any big project, according to a 1984 cabinet decision.

275. MALTA: A comprehensive new environmental empowering law is awaiting presentation to the House of Representatives.

276. MAURITANIA: Preparation of a national strategy for conservation of natural resources began in 1987; the fight against desertification is seen as Mauritania's number one problem, and Mauritania's leaders have been mobilized by the theme of conservation for sustainable development.

277. MEXICO: The 'Mexican strategy for study and conservation of wetlands' was published in the first number of the Ramsar Bulletin.

278. MOROCCO: Measures have been taken to improve institutional arrangements, legislation, awareness and appreciation of wetlands, training and solution of problems at individual sites.

279. NETHERLANDS: The Nature Policy Plan, published in 1989, aims to establish a national ecological network comprising all wetlands of international importance. The Dutch government's international policy on wetlands pays special interest to wetlands in West Africa situated in the Western Palearctic migration route. Projects have been developed for four important 'bird countries' - Mauritania, Senegal, Guinea-Bissau and Mali.

280. NEW ZEALAND: The New Zealand Wetlands Management Policy, adopted in 1986, is significant in fulfilling obligations under Ramsar. It includes protection of important wetlands, maintenance of an inventory and promotion of public awareness.

281. NORWAY: A systematic conservation programme for wetlands and other natural habitats was instituted in the early 1970s. General policy is to protect the most important areas under the Nature Conservation Act. The 1986 Planning Act authorizes country governors to object to plans which have a negative effect on conservation. Environmental impact assessments are required before decisions on hydro-electric schemes and plans to protect specific watercourses have been approved. The national Master Plan for Water Resources, adopted in 1986, states which projects should have priority for hydro power development and which water courses should be reserved for other developments.

282. POLAND: A programme for environmental protection including wetlands up to the year 2010 has been prepared for approval by the Polish Parliament. Since early 1989 however a new version has been developed, which adopts the concepts of eco-development and eco-policy when determining the strategic programmes for determining the country's economic structure. Among detailed recommendations agreed are: organization of a national inventory of resources and values of the natural environment, and establishment of an ecological system of protected areas, embracing 30% of the country.

283. SOUTH AFRICA: Progress towards national wetland policies is achieved through the Environment Conservation Act of 1989 which makes provision for the adoption of new improved policy and legislation. Revision of the 1956 Water Act is being considered and regulations made under the Conservation of Agricultural Resources Act and the Forest Act are being revised.



284. SWEDEN: The Swedish Environment Protection Agency has published a policy document concerning the implementation of the Ramsar Convention, which has been distributed at the Montreux meeting as an information document.

285. TUNISIA: Protection of wetlands is covered by three specific articles in the new Forestry Code approved by law in 1988.

286. UGANDA: The Government of Uganda is implementing a National Wetland Conservation and Management Programme, overseen by an inter-ministerial committee. While awaiting the policy guidelines, a ban on large-scale drainage or development has been issued. A comprehensive paper will be presented at the Wise Use Workshop at Montreux.

287. USSR: The Resolution of the Supreme Soviet mentioned in paragraphs 219 and 260 calls for submission in spring 1990 of the draft of a long-term Governmental Programme for the conservation of the environment and rational use of natural resources of the USSR for the period until 2005. At the same time a new Land Act and Property Act are under discussion. Concern is caused by attempts of legislators to extend rights of property and management of conservation areas (even wetlands of international importance) to the level of Union republics and even krajs or oblasts. With the unequal development of conservation traditions and agriculture, this may lead to negative consequences for wetlands.

288. UNITED KINGDOM: A wide range of legislation affects wetlands, but the principal laws are the 1968 Countryside Act and the 1981 Wildlife and Countryside Act, under which areas of outstanding importance are notified as Sites of Special Scientific Interest. The duties of local authorities in relation to nature conservation and developmental control are set out in Governmental circulars. Similar circulars which make specific reference to Ramsar relate to areas requiring environmental assessment. The national report outlines the bodies charged with applying this legislation and some of the publications produced by many research bodies.

289. USA: In his Budget address to Congress, the US President set "no net loss of wetlands" as a national goal and established the Inter-Agency Task Force to determine the means for achieving this goal. The Task Force will:

- consider ways to improve Executive Orders on wetland protection and floodplain management;

- identify ways of strengthening existing Federal programmes and regulations that protect, maintain and restore wetlands;
- provide clear direction to Federal agencies to work in concert to achieve this goal;
- identify ways of involving state and local governments and private sector entities; and
- coordinate and assess implementation of the no-net-loss goal by all governmental sectors and the private sector.

### **Priority action at particular wetlands**

290. In the outline for national reports, Contracting Parties were requested to report on 'progress made towards priority actions at particular wetlands'. Such action was an element in the 'Guidelines for the implementation of the wise use concept' proposed by the Working Group on Wise Use established at Regina (see their report, annexed as Annex 2 to document C.4.I0). The outline particularly referred to establishment and wardening of nature reserves on non-listed wetlands (an obligation under Article 4.1 of the Convention). This issue is to be discussed at Montreux Workshop C "Establishment of wetland reserves", and in the following paragraphs the relevant extracts are summarized for the guidelines of this workshop.

291. ALGERIA: Waterfowl monitors have been trained for waterfowl counts, a national network of observers and reporters has been established, courses on wetland management have been organized.

292. AUSTRALIA: The national report indicates that in addition to measures to improve wetland management in Victoria (see paragraph 265) all other Australian States and Territories are pursuing similar programmes. In the Northern Territory a conservation and recreation development strategy for wetlands of the 'Top End' has been prepared, and detailed surveys, involving satellite imagery, are being carried out. In South Australia, where much original wetland has been lost to primary production, management needs are being studied. In Australian Capital Territory, public comments have been received on a draft plan for Jerrabomberra wetlands. New South Wales has made extensions to 40 reserves since mid 1987 and new government guidelines have been established to govern mineral sand mining. Key habitats are being mapped in Queensland, while in Western Australia a large team of volunteers is surveying waterbird use of the Swan Coastal Plain.

293. BELGIUM: Since 1984, the Flemish Executive gives grants (going up to 60%) to private bodies for acquisition of nature reserves. Up to the present 37 private reserves

covering 1,200 hectares have been officially recognised, while 25 reserves on state land covering 3,400 hectares have been established.

294. BULGARIA: The national report gives details of four wetland sites established as protected wilderness sites before the Regina meeting and two more in 1989. In all they cover over 750 hectares.

295. DENMARK: A departmental order, in force from 1987 to 1990, prohibits hunting from motor boats in certain Danish waters, in order to reduce hunting pressure. Another order forbids use of lead shot in Ramsar sites.

296. GERMAN DEMOCRATIC REPUBLIC: In addition to Ramsar sites, 37 wetlands of national importance, covering 160,130 hectares, have been identified. These include several potential Ramsar sites. 15 of the 37 are completely covered by nature reserve regulations, another 13 have protected areas in the core zones. In all 12.3% of the area has nature reserve status. Management guidelines exist for the nature reserves. some are warded by state nature protection stations or wardens, and wardening is to be developed further.

297. FEDERAL REPUBLIC OF GERMANY: The national report gives details of draft regulations to control shipping in the Wadden Sea, which will set a precedent for other areas. It also refers to trilateral Danish/German/Netherlands consultations in the Wadden Sea. The 'integrated Rhine programme' in Baden-Wurtemberg aims to maintain or re-create near-natural wetlands in riverine meadows. In Schleswig-Holstein: waterfowl hunting is to be completely prohibited in the Wadden Sea National Park; a plan is to be established 10-meter wide unused strips along flowing streams; about 24,000 hectares mainly of small damp areas are covered by a programme to promote extensive use of grassland.

298. IRELAND: It is policy to designate all statutorily protected wetlands of international importance under the Ramsar Convention. So far no wetlands of "national" importance have received statutory protection, though these are now listed under the European Commission's CORINE programme. Wardening for listed and non-listed sites is seen as a priority.

299. JAPAN: Since Regina, three sites of importance for migratory waders or swans have been designated as protected areas. Two consist mainly of wetlands.

300. MOROCCO: It is intended to include the Iriki wetland in a Saharan national park.

301. NETHERLANDS: A policy on protection and management of non-designated wetlands has been carried out in the last ten years, through purchases made by the state and private nature organizations, and through implementation of the Nature Conservation Act.

302. NEW ZEALAND: The national report notes three specific examples of action at particular wetland sites:

- Protection of high country wetlands by private land covenants as a result of identification by the Protected Natural Areas Programme
- Monitoring of Kaimaumu Swamp following a fire in 1988
- Research on the endangered Australasian Bittern at Whangamarino

303. NORWAY: Priority is given to finalizing regional wetland conservation plans, and the establishment of nature reserves of international, national or regional importance.

304. POLAND: In implementation of the national policies, many protected areas have been established. Between 31.12.87 and 31.12.89, the following progress was made:

- National parks: on 31.12.87 14 areas: 126,574 hectares - 31.12.89 15 areas: 141,414 hectares (The new national park is the Wigry National Park)
- Natural reserves: on 31.12.87, 937 covering 107,181 ha - 31.12.89, 988 covering 116,714 ha
- Landscape parks on 31.12.87, 36 covering 1,558,138 ha - with buffer zones: 31.12.89, 51 covering 2,237,726 ha
- Protected Landscape areas: on 31.12.87, 154 covering 3,165,316 ha - 31.12.89, 178 covering 4,113,522 ha

305. PORTUGAL: Nature reserves have been established at five wetlands not on the Ramsar List - the natural reserves of Paul de Arzila, Paul de Madras, Paul de Boquilobo, the Sado Estuary and Sepal de Castro Marim. The following five wetlands have been designated as Special Protection Areas under the European Community's Wild Birds Directive: estuaries of the Minho and Coura, Ria de Aveiro, Barrage de Murta, Lagoon of St Andre and Lagoon of Sancha.

306. SENEGAL: The network of protected sites has been recently completed by the establishment of the Popenguine-Guéréc reserve. A similar but large site near the ORSTOM station at Mbour has just been established. In Casamance the Kassel reserve is being established at the request of two villages. The proposed Palmarin reserve (north of

the Saloum delta) has not progressed. The proposed conservation area at Lake Retba, near Niayes, north of Dakar is still on the table, and tourist developments there have been abandoned. Nor should it be forgotten that Senegal's famous Niokdo-Koba park includes major wetlands in the valley of the Gambia River.

307. SOUTH AFRICA: Section 230 of the Environment Conservation Act empowers the Environment Minister to declare any area as a "limited development area", thereby prohibiting development and activities. Consideration is being given to applying this declaration to all Ramsar sites, thereby ensuring environmentally sound planning of these wetlands and their catchment areas. Management plans are also being drawn up for priority areas in private ownership, in cooperation with owners.

308. SWEDEN: The Swedish Environmental Protection Agency organized a training course on wetland ecological issues for 20 administrative and field personnel in 1989. It will be repeated in 1990.

309. SWITZERLAND: The national report gives details of a series of major wetland research projects, and of a 5-year plan to manage and protect the southern shores of the Lake of Neuchâtel.

310. UNITED KINGDOM: In general, only sites that are reserves in the control of government or voluntary bodies have management plans. The main objectives of such plans tend to be conservation of particular plants and animal species. In addition, a wide variety of projects aim at enhancing or restoring wetlands, including reduction of chemical and nutrient pollution of rivers such as Thames and Clyde. Restoration of peatlands is also being attempted where peat has been removed on a large scale; experience, as in the Netherlands, suggests that such restoration can be partly successful, though the community produced is often poorer than the original and the engineering works are very expensive.

311. USA: The national report gives details of a series of ongoing activities: conducting a national inventory; wetland acquisition - the National Wildlife Refuge System; National Wetlands Priority Conservation Plan; Impact of Federal Programs on Wetlands; North American Waterfowl Management Plan; Measures under the 1985 Food Security Act; Educational and Public Awareness Programs; Federal Agency Initiatives; Pending Wetlands Legislation; International Activities; and exchange with other Ramsar Parties.

312. VENEZUELA: The national report emphasizes that in addition to the Ramsar site of Cuare, Venezuela has a considerable number of protected areas which include wetlands.

Fifteen of these, with differing protection status are mentioned. In addition, however, there are large unprotected areas. Management plans have been heavily affected by aquaculture. The importance of environmental impact statements is also emphasized.

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## **V GENERAL COMMENTS ON THE CONVENTION AND ITS IMPLEMENTATION**

### **General comments**

313. In the 'Outline for national reports', Contracting Parties were requested to present any general comments on the implementation of the Convention and on any difficulties experienced in implementation. It should be recalled that Article 6.2a of the Convention stipulates that the Conference of the Parties is competent, *inter alia*, "to discuss the implementation of the Convention". In the following paragraphs, comments from national reports are summarized.

314. ALGERIA: Although training courses have been organized, wetland management remains very difficult. Advanced courses must be organized, managers must be given equipment and finance to carry out public awareness campaigns. Scientific and technical problems, such as degradation of lake vegetation following carp introduction, must be monitored by experts provided by the Contracting Parties.

315. AUSTRALIA: The last two years have seen a noticeable escalation in wetland conservation and management initiatives, as a result of greater community awareness and increased resources.

316. BULGARIA: Proper implementation will guarantee wise use of wetlands as natural resources, recreation areas, tourist sights and reserves. Difficulties have been experienced in comprehensive implementation from the Ministry of Agriculture and the Food Industry, and from Vodproekt (an organization designing land reclamation facilities).

317. CANADA: One problem was the general ignorance of the Convention outside the Canadian Wildlife Service. General briefing sessions have been held for senior management of Environment Canada. As a result, "Ramsar" is once again becoming a household word in several key decision-making centres.

318. A major challenge facing not only Canada but other Contracting Parties is the need to shift public attitudes away from traditional views of "wetlands as wastelands". Despite changes, these attitudes permeate all levels of Canada's social fabric. There is much to do,

especially at local and municipal levels, to preserve valuable wetlands from conversion to golf courses and housing developments.

319. DENMARK: In Denmark there have been only minor problems with the implementation of the Convention, probably because the Ramsar Convention is one of the oldest and most remarkable of the nature conservation conventions that Denmark has ratified.

320. FEDERAL REPUBLIC OF GERMANY: The Länder governments, which are responsible for implementation of the Convention, are striving to ensure that wetlands are conserved. Nevertheless, the sites listed by the Federal Republic under the Convention do not represent a "complete network" of waterfowl habitats. The Länder will make designations of further "potential" Ramsar sites at the appropriate time. Application of the Convention leaves something to be desired, since the demands placed on sites from the conservation point of view are often not in harmony with demands made from other points of view. It is the duty of the authorities of the Länder to support even better implementation of the Ramsar Convention in future. As far as the Wadden Sea is concerned, the Federal government and coastal Länder have worked with Denmark and the Netherlands for the conservation of this, the largest of wetlands of international importance in the Federal Republic (although the Schleswig-Holstein sections have not yet been designated for the Ramsar list).

321. GREECE: The Ramsar Convention has been the basis of most wetland conservation efforts in Greece. It has proved to be a relatively efficient argument against further degradation and development pressures. However, its implementation has not been up to Greek expectations: the first stage of zoning determination has not been completed, despite the authorities' efforts. The consensus procedures selected have not been successful; on the contrary, they have turned out to be more difficult and time-consuming than expected.

322. Furthermore, the "wise use" and "integrated management" concepts have not been well defined and understood in practice by the international community. Many misunderstandings and misuses of these ideas have, in some cases, widened the gap between development and nature protection agencies in Greece. The lack of appropriate technical manuals has strengthened the "trial and error" practice.

323. HUNGARY: The implementation of the Convention at international level has been significantly improved, particularly during the last few years. The development of the world network of Ramsar sites is remarkable, both as regards numbers and extent. The

elaboration and utilization of the "wise use" concept gives a further boost to implementation.

324. ICELAND: The Convention has acted as a stimulus and served to guide the effort to conserve Icelandic wetlands with regard to the international situation. It will take years to ensure that reserves are declared on all sites of international importance and work is continuing in this direction. However, we are now and then reminded that Iceland is a primary producer rather than a consumer of waterfowl: should real crises develop in choice of land use in future, this fact may come to play a larger part.

325. MAURITANIA: Mauritania is particularly interested in Ramsar and has taken part in meetings and the Working Group. Mauritania requests assistance for the creation of new Ramsar sites, and trusts that the Convention's activities will not be limited to pure conservation aspects, but will be oriented more and more to solving socio-economic problems found at Ramsar sites, and in particular, to responding to the fundamental needs of people living in surrounding areas; their impact could lead to the degradation of these ecosystems.

326. MOROCCO: In general, there are no major problems inherent in implementation of the Convention.

327. NETHERLANDS: The Dutch government has always recognized the value of protection and wise use of wetlands. It played an active part in establishment of the Convention and will continue its efforts towards further development and implementation. Notification of new wetlands will continue as soon as there is administrative agreement on maintenance of the ecological function in question. The Dutch policy on implementation was laid down in a 1985 memorandum.

328. NEW ZEALAND: New Zealand is committed to implementing the Convention and has made significant progress in developing a wetland policy and inventory. Three new sites were designated in 1989/90 and New Zealand plans to designate more in future.

329. NORWAY: Norwegian wetlands are generally smaller than those in other countries, and at least in the north, function mainly as breeding areas for waterfowl. The original criteria for identifying wetlands of international importance were therefore not particularly suitable. The problem has been overcome, at least partly, by the adoption of Norwegian criteria, and by combining smaller units into wetland systems of international importance.



330. PORTUGAL: Economic stimuli provided by the European Community in support of sectoral activities such as aquaculture, and the absence of financial support for activities like salt exploitation increases the pressure of aquaculture, encourages abandonment of salt extraction, and makes application of the Convention more difficult. Difficulties also arise when management authorities lack vision and understanding of wetland values and importance. Some of the EEC's structural funds have a direct effect on wetland management; while fishery funding has had a negative effect, those available under "Action by the Community for the Environment" have been positive.

331. The Convention has not only promoted conservation of listed sites. By the very fact that Portugal is a Contracting Party, the authorities and public opinion have been alerted to the value of wetlands.

332. UGANDA: Uganda became a Contracting Party in 1988 and will be attending the Conference of the Parties for the first time ever at Montreux:. Since wetlands cover over 10% of Uganda's land surface, they are considered a major natural resource which should be properly managed. Initiatives like the wetland workshop hosted by Uganda in 1990 will help ensure that exchange of experience and information is maintained.

333. USSR: The main difficulties in implementing the Convention are caused by the fact that the Convention and its recommendations give no definition of a wetland as a special type of conservation object.

334. UNITED KINGDOM: The recognition of the importance of wetlands and the role of the Convention continues to grow. Recent planning decisions at all levels show an improved appreciation of the "whole ecosystem" approach pioneered by the Ramsar Convention.

335. USA: The national report mentions two developments credited to non-governmental organizations (NGOs). The USA now has an NGO National Ramsar Committee which updates NGOs on Ramsar activities and channels future work. A great deal of credit should go to the International Wetlands Working Group for their work towards wetland conservation within the community of International Development Agencies.

336. URUGUAY: Application of the Convention in Uruguay has faced difficulties because of the lack of a national technical, administrative and legal body charged with its execution. Difficulties have also arisen because much of the area concerned is privately owned, and is the subject of transformation projects. It is proposed to establish a technical commission on Bañados del Este, and to carry out ecological and zoological research.

**Instances where the Convention has facilitated conservation of particular sites or species:**

337. The 'Outline for national reports' invited comments on the above theme. Rather few specific comments were in fact received.

338. ALGERIA: Protection of wetlands has enabled waterfowl species to increase, notably protected species such as the white-headed duck *Oxyura leucocephala*.

339. AUSTRALIA: The Australian report notes a series of instances where the Convention has facilitated conservation of sites or species:

- In Tasmania, increased protection status of Sea Elephant Nature Reserve and Moulting Lagoon; prevention of drainage at Logan Lagoon.
- In Victoria, conservation of the endangered Little Tern; rejection of plans to permit a piggery near Lake Cundare, closure of a garbage tip near Lake Beeac; promotion of management area plans for three coastal Ramsar sites; recognition of several sites as areas of high conservation value.
- In South Australia, conservation of Coongie Lakes and Riverlands.

340. BULGARIA: Designation has helped in conservation of Lake Atanassovsko.

341 CANADA: At the Long Point wetlands in Ontario, Ramsar designation helped stop a marina proposal that included dredging a channel through part of the wetlands.

342. DENMARK: It is the general experience of the Environment Ministry that the Ramsar Convention has facilitated the conservation of certain Ramsar sites (e.g. Ringkobing and Nissum Fjords) by strengthening arguments for their conservation. An example of species protection is the full protection of White-fronted goose *Anser albifrons* through its stay at Næra Coast, the only important Danish site for this species.

343. GERMAN DEMOCRATIC REPUBLIC: The Republic's membership of Ramsar is a major contribution to respect and promotion by users and the public for conservation aims, species protection and inventory. An example is the prevention of intensification of fish production in the Peitz Fishponds and Galenbecker See.

344. IRELAND: The Convention, criteria and guidelines are cited whenever necessary as a basic justification for the protection purchase and management of sites of international importance and the conservation of species.

345. JAPAN: More people are recognizing the importance of wetland protection since designation for the Ramsar List. Lectures on nature, or exhibitions on wetlands are actively given.

346. NETHERLANDS: In the application of national legislative and other measures, conservation of wetlands has received special attention to which the aims, criteria, and obligations implied by the Convention have made a significant contribution.

347. NEW ZEALAND: The Convention and criteria are often used to support protection of New Zealand wetlands. Two recent examples:

- Land was assumed to have national conservation values if it contained wetlands of international importance, and was therefore allocated to the Department of Conservation rather than local government.
- The international value of Lake Rotoehu was used in a recent objection to a proposed development on the lake shore.

348. NORWAY: The fact that some wetlands are on the Ramsar List has played an important role in preventing human activities or developments. Such cases have arisen since the Regina Conference at Akersvika, Nordre Oyeren, Ilene and Presterodkilen and Orlander.

349. SOUTH AFRICA: The fact that the St Lucia System has been listed by South Africa under the Convention has been used extensively by those arguing against the proposed mining of the dunes (see paragraph 213 above). Public pressure against mining in the Eastern Shores State Forest also led to execution of an environmental impact study.

350. SWEDEN: An application concerning construction of a marina for pleasure craft within the Falsterbo-Foteviken Ramsar site has been rejected by the Water Rights Court and the Government.

351. TUNISIA: The exhibition at the Ecomuseum in the Ichkeul Ramsar site received funding from WWF International, the US Fish and Wildlife Service and the World Heritage Convention. It was opened by the Minister of Agriculture on 1 February 1989.

## **Consultations with other Contracting Parties about shared wetlands**

352. Article 5 of the Convention states that "Contracting Parties shall consult with each other about implementing obligations arising from the Convention especially in the case of a wetland extending over the territories of more than one Contracting Party". Workshop B is to discuss, among other 'International Law Requirements', this obligation to consult, particularly in more general terms. In the first part of Workshop F on 'International Cooperation for Wetland Conservation', consultations about shared wetlands will be discussed. The 'Outline for national reports' invited Contracting Parties to give details of consultations held with other Contracting Parties and especially shared wetlands, as background information for workshop F. These comments are summarized in the following paragraphs.

353. AUSTRALIA: Migratory birds are Australia's only shared wetland resource. Through bilateral agreements with Japan and China, Australia is obliged to protect the important habitats of these species. Preliminary negotiations have begun with government officials from USSR and Papua New Guinea for similar bilateral agreements.

354. BELGIUM: In the Benelux framework, the heathland complex at Kalmthout (a Ramsar site) and the Netherlands is subject to a regional park procedure since 24 November 1987.

355. The tidal marshes along the Lower Scheldt form a complex partly in the territory of the Netherlands. However, these transfrontier wetlands do not enjoy Ramsar status in the Netherlands; the "Verdronken Land van Saeftinge" is particularly famous for its waterfowl populations (but see paragraphs 67 and 162 above).

356. Restoration measures to prevent siltation at the Belgian Ramsar site of Zwin were the subject of debates and studies between Flemish and Netherlands officials and reserve managers. Major work to improve the reserve was finally carried out.

357. Permanent information exchanges have been established between those responsible for the Belgian Ramsar site at Harchies and the Natural Regional Park of the Scarpe in France, for joint studies of this transfrontier site.

358. CANADA: Canada and the USA share many ecosystems and, both formally and informally, share views and information on various Ramsar efforts. The two Contracting Parties have recently begun to look at a continental approach to Ramsar planning, though this is still embryonic.

359. CHILE: No consultations have been practised as yet, since Argentina and Bolivia are not yet members of the Convention. Chile has offered to help Bolivia with research in high Andean saline lakes, and there would be plenty of opportunities for joint work with Argentina. An international workshop of South American flamingo specialists was held in Chile with participants from Argentina, Bolivia, Peru, Venezuela, Chile and USA.

360. DENMARK: Trilateral cooperation with the Federal Republic of Germany and the Netherlands on the Wadden Sea has existed since 1978 and was strengthened considerably by the creation of the Common Wadden Sea Secretariat in 1987.

361. GERMAN DEMOCRATIC REPUBLIC: There is a need for consultations with Poland about the German Democratic Republics' Lower Oder valley Ramsar site. Management of the east bank of the Oder should be discussed, together with reciprocal effects on the Polish Ramsar site of Warta Valley/Slonsk.

362. FEDERAL REPUBLIC OF GERMANY: The national report refers extensively to trilateral Wadden Sea consultations (see paragraph 360).

363. HUNGARY: Preparatory discussions are being held about a future national park to be created in partnership with Austria around Lake Fertö (Neusiedlersee). In view of this plan, a new Ramsar site was designated on the Hungarian part of the lake.

364. IRELAND: There have been no consultations with other Contracting Parties on wetlands extending over common frontiers, but consultations did take place with respect to certain species such as the Greenland White-fronted goose *Anser albifrons flavirostris*.

365. NETHERLANDS: The national report refers to trilateral consultations about the Wadden Sea (see paragraph 360).

366. SENEGAL: The draft report notes that contacts with Mauritania about the proposed international park of Djoudj and Diawling have for the moment stopped (see paragraph 64 above). The same is true of the project (mentioned in the Senegalese report at Regina) for common management with Gambia of mangroves in the Saloum Delta and the River Gambia.

367. USSR: The Bureau has been informed by the Romanian authorities that when Romania becomes a Contracting Party to the Convention, it will wish to collaborate closely with the USSR in management of the Danube Delta. The part of the Danube Delta in the USSR has already been designated a Ramsar site.

368. UNITED KINGDOM: The UK national report notes that relationships with the Wildlife Service of the Republic of Ireland remain cordial; free exchange of scientific data on species and habitats serves to promote nature conservation throughout the whole of the island.

### **The role of development agencies in wetland conservation**

369. The Regina meeting approved a Recommendation (REC. C.3.4) urging development agencies to take greater account of wetland values and to use their influence in this field with borrowing or recipient governments (for full text see document INF. C.4.I). The question of development assistance affecting wetlands is one of the items to be covered in workshop F on 'international cooperation for wetland conservation'. Contracting Parties were therefore invited in the 'Outline for national reports' to comment on the role of development agencies in wetland conservation, both as regards appropriate agencies in Contracting Parties and international governmental agencies. The comments are summarized in the following paragraphs.

370. AUSTRALIA: Australia has had little involvement with development agencies in regard to wetland conservation. It is anticipated that approaches will be made to such agencies in the near future to assist with the development of Australian wetland initiatives in the region.

371. CANADA: Canada's development agency, the Canadian International Development Agency (CIDA), has been instrumental in facilitating the work of Ramsar and of wetland conservation. CIDA has contributed funds for the development of a management plan for a major Suriname wetland, and has provided funding to allow representation from several less-developed countries to attend the Montreux meeting.

372. CHILE: This is a fundamental aspect for developing countries which need to receive technical assistance for implementing wetland policies for convincing authorities of wetland values and public consciousness for doing advanced research to conserve habitats and species better, for studying restoration and management of resources, and for carrying out wise and sustainable use of resources.

373. DENMARK: The Danish International Development Agency (DANIDA) has issued four reports concerning wetland conservation.

374. EGYPT: As noted in paragraph 194, the Egyptian report notes that financial support, contributions and management projects in wetlands are urgently needed. The report

appeals for help from international organizations to help set up an integrated wetland management plan in Egypt.

375. FINLAND: The Finnish International Development Agency (FINNIDA) and IUCN have established an agreement on environmental issues in developing countries. The most important item in the agreement is the support for the IUCN wetland programme.

376. MAURITANIA: As noted in paragraph 325, the Mauritanian report emphasizes the need for technical assistance from outside sources to implement the Convention.

377. MOROCCO: The Moroccan report notes that until now there have been no projects by development aid agencies in Morocco which had a negative effect on wetlands. The report refers to the sections of Regina Recommendation C.3.4 which mention the creation of "special regional wetland programmes" and the strengthening of "ecological expertise in all departments involved in development and implementation of projects affecting wetlands": the report notes that Morocco has not so far benefited from any support in these fields. Such support would be welcome, though Morocco will continue to make the necessary efforts to apply the Convention.

378. NETHERLANDS: Wetland conservation is a priority target for financial support in environmental projects supported by the Netherlands Ministry of Development Cooperation. Among the projects supported are the Asian Wetland Bureau, an IUCN project on wetland conservation in the Sahel countries, an IUCN/UNEP project on coastal areas in the Indian subcontinent and a Ramsar "wise use" project.

379. NORWAY: The Norwegian Development Agency (NORAD) has supported several wetland projects, including development of a wetland policy in Uganda and specific projects in Central America.

380. SOUTH AFRICA: In the implementation of development projects, the Development Bank of Southern Africa recognises the relationship between environmental quality, natural ecosystems and development.

381. SWEDEN: Contacts have taken place between the Swedish International Development Agency (SIDA) and the Ramsar Bureau concerning support for projects in developing countries. One goal in connection with foreign aid is to support the integration of environmental-orientated policies into all activities of society. At present SIDA and the Swedish Foreign Office are studying the possibilities of using the Ramsar Convention as a tool for this purpose.

382. SWITZERLAND: The Federal Department for Development Cooperation and Humanitarian Aid is, in general, very much aware of the needs to safeguard nature and landscape (and especially wetlands) in its aid activities concerning developing countries. It has made substantial contributions in this field to IUCN; it has not yet made grants to Ramsar Contracting Parties through the Convention's permanent structure, though this could undoubtedly happen in the future. The Department has decided, in collaboration with the Federal Office for External Economic Affairs, to submit certain aid projects to developing countries for an impact statement so that the priorities of nature and landscape protection are more fully covered.

383. UNITED KINGDOM: The development agency for the UK overseas assistance is the Overseas Development Administration, an integral part of the Foreign and Commonwealth office. It has produced an operational guide entitled "Manual of Environmental Appraisal" for use by aid agency practitioners.